

Contractor Charges Agreement Was In Restraint of Trade

(Concluded from Page 1, Column 2) trades, and which was dissolved Aug. 15, 1938, following charges by Secretary of the Interior Ickes that members were engaged in price fixing on government work.

The plaintiff, engaged in installing plumbing and heating equipment, claims that although its was the lowest bid for work on the Michigan Mutual Liability Co. hospital in 1937, it lost the job because it could not arrange to get labor, the Administrative Committee of the Voluntary Trade Agreement refusing to certify it through the unions.

Gist of the Voluntary Agreement entered into by the defendants, the plaintiff charges, was to create and operate the Administrative Committee as a depository for all bids on all jobs exceeding \$250 for the furnishing and installation of plumbing, heating, piping, ventilating, refrigeration, and air-conditioning supplies, and of all labor connected with installation thereof, so as to control prices for such materials and labor, and to prevent the plaintiff and others from obtaining any such business without joining in such agreement.

In agreeing to carry out the terms of the Voluntary Trade Agreement, the plaintiff asserts, the defendants unlawfully regulated and affected the prices of all materials and labor entering into the sale and installation of such supplies, and constituted a trust for the purpose of restricting trade and commerce.

HOW THEY CHARGED

By terms of the Voluntary Trade Agreement, it is charged, the defendants were bound to make the following charges in connection with sale and installation of plumbing, heating, piping, refrigeration, ventilating, and air-conditioning supplies:

A flat charge of 2% for cartage of such supplies.

A flat charge of 10% on all productive labor in connection therewith.

A flat charge of 4% for contingent liabilities and public liability.

A flat charge for overhead of not less than 12½% of the total net cost of such labor and supplies.

A profit of not less than a flat rate of 10% of the total gross cost thereof.

A charge at the flat rate of not less than 1¼% of the total cost for engineering services and association dues, etc.

In furtherance of the agreement, the plaintiff's declaration continues, it was required by the defendants and others joined in the agreement that a certificate in special form, as prepared by the Administrative Committee, be secured by any member to the agreement, showing compliance with provisions of the agreement, and to keep the certificate posted in a conspicuous place on any job undertaken.

UNION AGREEMENT

Also as part of the plan, it is charged, the Detroit Association of Master Plumbers entered into an agreement with Local Union 98 of the Journeymen Plumbers Protective Association of Detroit, and with Local 636 of the Detroit Steam Fitters Protective Association, labor unions, whereby the supply of union labor for these trades in the Detroit metropolitan area would be limited to such persons and firms who kept posted on their jobs a certificate from the Administrative Committee to the effect that conditions of the Voluntary Trade Agreement had been complied with.

Effect of these agreements, it is charged, was to preclude any plumbing and heating contractor from securing a contract for installation of plumbing and heating materials unless he joined in the Voluntary Trade Agreement and accepted its provisions.

On the Michigan Mutual Liability Co. hospital job, the plaintiff asserts, it was low bidder on heating and plumbing work with \$39,300, and was told by the architect, Charles Noble, and the general contractors, Barton-Malow Co., that it was low and as such was entitled to the contract. Architect and general contractor raised a question, however, as to

Gets New Position



R. T. SCHEU
Manager, direct sales division,
Kelvinator division, Nash-Kelvinator Corp.

whether or not the company would be awarded the contract, because of its non-compliance with the Voluntary Trade Agreement.

Defendants notified Michigan Mutual Liability Co. and the architect that the plaintiff would be unable to furnish labor for the job, it is charged, because it was not a member of the Administrative Committee, and had not agreed to be bound by the terms thereof, and had not joined in the agreement. Because the company could not produce a certificate of compliance, it lost the contract, it is charged.

BASIS OF CLAIMS

Loss of the contract cost the plaintiff \$7,500 profit which it would otherwise have made on the job, it is charged; and inability to secure any other plumbing and heating contracts from Jan. 1, 1938 to the time the suit was filed, during which time the company had to pay for trained help and spend other money in trying to secure such business caused further damage to the extent of \$5,000.

Damages of \$25,000, double the amounts listed, are asked, the plaintiff being entitled to two-fold damages in accordance with Act 255 of the Public Acts of Michigan of 1899 and amendatory and supplementary statutes.

PRICE-FIXING CHARGED

In the second count of the declaration, the plaintiff charges that by conspiring to join in the Voluntary Trade Agreement and carrying out its terms, the defendants entered into an unlawful contract for the purpose of fixing prices, restricting competition, and controlling plumbing, heating, ventilating, refrigeration, and air-conditioning equipment in and around Detroit.

It also is charged that the defendants caused to be published throughout the building trade in Detroit that any contractor who did not join in the Voluntary Trade Agreement was not an acceptable bidder, and could not be relied upon to complete his contract.

Capital Range Dealers Get New Wiring Plan

(Concluded from Page 1, Column 4) court ruling last January enjoining the Potomac Electric Power Co. from making any contribution to range wiring. Previous to the ruling a flat charge of \$15 was made for the wiring installation.

Under the new plan the customer is quoted an installed list price. It will average about \$47.30 for the overall run of jobs, estimates J. S. Bartlett, managing director of the institute. A feature of the agreement is that the appliance retailer will receive a percentage of the wiring charge.

In the District of Columbia the charge will cover the cost of a rigid conduit as required by ordinance. In outlying territory contractors may use service entrance cables. In conformance with the court ruling, the power company will install only the conductors.

The plan is in operation after months of inactivity in range promotion. The institute plans to recover lost ground with an early fall feature range campaign.

John A. Seeger Dead; Founder of Seeger Co.

(Concluded from Page 1, Column 4) that of an apprentice in the office of a contractor, builder, and architect. In 1872 he was made a member of the building firm and the name was changed to the Leonard-Seeger Co.

This firm built several buildings, but the partnership was dissolved after a few years, and Mr. Seeger became associated with the Bohn Mfg. Co., engaged in the manufacturing of sash, door, and interior woodwork. He was eventually made president of the company.

In 1900, sensing the growing importance of refrigeration in the modern way of living, he organized the firm which was at first known as the Seeger-Galasch Refrigerator Co., and which is now the Seeger Refrigerator Co., probably the best-known independent manufacturer of refrigerator cabinets in the country today.

The firm's original plant was at Seventh and Kittson Sts., but it soon outgrew the site and a modern factory was built at 850 Arcade St., which has since been expanded.

His leadership in civic affairs brought him the presidency of the St. Paul Association in 1922, to which post he was re-elected in 1923.

Mr. Seeger was a leader in sponsoring the \$16,000,000 bond issue in 1928, the passage of which enabled the city of St. Paul to build the present City Hall and Courthouse, to improve and enlarge the auditorium, and to develop Kellogg Blvd.

He was an ardent supporter of

state and federal laws seeking to moderate the liquor industry and, although he was opposed to prohibition, advocated conservative administration of the liquor laws.

Mr. Seeger is survived by his widow, Elvina; two sons, Walter G. (president of the Seeger Refrigerator Co.) and G. R. Seeger; three daughters, Mrs. L. A. Korfhage and Mrs. R. S. Ahrens, both of St. Paul, and Mrs. C. A. Meussel of Pehlham Manor, N. Y.; 15 grandchildren, and five great grandchildren.

G-E Boston Factory Branch Headquarters of Sales In New England Area

(Concluded from Page 1, Column 5) operating manager. The branch will be responsible for distribution of household and commercial refrigerators, ranges, water heaters, dishwashers, disposal units, unit kitchens, and home laundry equipment.

Coincidental with establishment of the new unit, the G-E appliance sales districts which formerly had their headquarters in Buffalo and in Boston have been consolidated into a single district. J. A. Ramsey, formerly at Buffalo, has been named manager of the new district, and will have headquarters in Boston.

Mr. Wilson, new manager of the Boston factory branch, had recently been made district appliance sales manager in Boston, a post he will now relinquish. Previously he had been sales manager for the G-E radio division in Bridgeport, Conn.

He joined G-E in 1935, after seven years with an eastern distributor.

Graybar To Distribute Hotpoint In Southwest

CHICAGO—Appointment of Graybar Electric Co., with offices in New Orleans and in Beaumont, Houston, and San Antonio, Tex., as distributor in the southwestern territory for the complete Hotpoint line of ranges, water heaters, refrigerators, dishwashers, waste units, washers, and ironers, has been announced by Edison General Electric Appliance Co., manufacturer of Hotpoint products, effective Sept. 1.

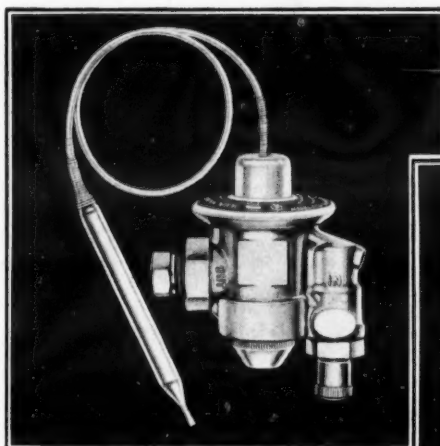
Hotpoint operations in south Texas will be handled by George Bryant, with headquarters in Houston. The north Texas division will be under the direction of Mr. Lawrence Merchant, of Graybar's Dallas headquarters, which will take over the Hotpoint line sometime in October.

Eleven field men will call on dealers and utilities under the direction of these two divisional sales managers.

Mr. Bryant comes to Texas from New York Graybar and has an extensive background of organization and appliance selling experience, including establishment of Hotpoint distributorships in Alabama and South Carolina. Mr. Merchant has been with Graybar in the Texas territory for a number of years.

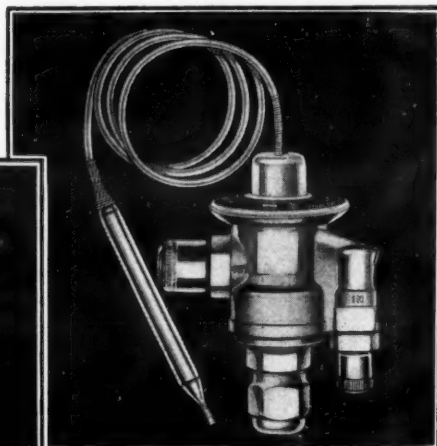
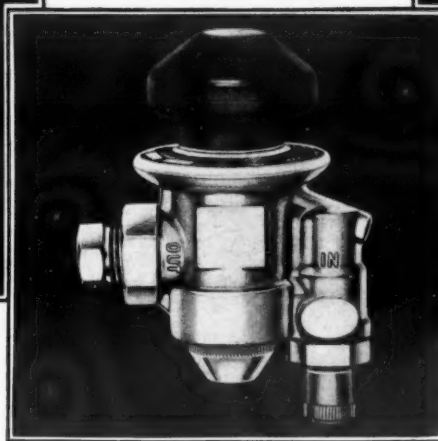
In announcing the appointment, R. W. Turnbull, Hotpoint vice president and general sales manager, said: "We now have Hotpoint distribution service in the southwest as complete and as efficient as it is anywhere in the country, even though counties in the southwest have the area of states in the east."

Announcing . . . NEW Dependability for Fractional Tonnage Refrigeration . . .



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THERMOSTATIC
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NEW MODEL 207
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Manufacturers, Jobbers and Service Engineers—all have welcomed these three new A-P Expansion Valves with enthusiasm! For they bring typical A-P Valve Dependability and Efficiency to the *small tonnage units*—from ¼ H. P. and up—for original equipment or replacement.

Brass Forged Bodies—Large Area Diaphragm—Self-Aligning Stellite Needle—Stainless Steel Seat—Fast, Smooth, Accurate Operation—these and all other well-known A-P features are now offered for the first time in New A-P Expansion Valves for fractional tonnage refrigeration! And the same "trouble-free service", so long a part of A-P equipped installations, is now extended to all applications *large and small!*

Be sure to get your copy of latest technical bulletins describing these new A-P Valves.

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THE BYWORD FOR A-P CONTROLS

Air Conditioning & Refrigeration News

The Newspaper of the Industry

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THE COLD CANVASS

By B. T. Umore

Loose Ends

Sam the Service Man opines that mebbe Roosevelt would have better luck in "purging" his system if he tried xylene, instead of using hot air.

A dealer who recently returned from a convention of "small business men" labeled it: "So What and the Seven Hundred Dwarfs."

Ed Theurer of Du Pont recently described a certain hotel as a place where "if you accidentally brush someone going through a door or getting into an elevator, and say, 'I beg your pardon,' he (or she!) answers, 'I'm glad to meet you, too.'"

R. I. Petrie, Leonard sales manager until a few weeks ago, has just discovered that big league baseball is a mighty fine thing to see, and wants to know how long that's been going on.

And Frank Hansen, newly over from Sydney, says that America is a fine country, but why do they call that stuff beer? And American football is exciting, but why do they call it football? Our office cynic replies that some rich man usually foots the bills so that he can bawl hell out of the players.

We See By the Papers

Probably Governor Davey of Ohio, defeated in a recent primary election, forgot the first principle he teaches his "Davey tree surgeons." He was on the wrong side of the limb when he started sawing.

Scientists are scouting the theory that the Missing Link was a Fusible Link. No doubt things got so hot around home that he just melted away.

Considering the way the government has been borrowing and spending money lately, all Secretary of the Treasury Morgenthau will have to say is, "How about \$700,000,000 till Saturday, boys?"

Pleading that American homes be democratic, a prominent psychologist tells us that parents are bringing up their children to be Fascists. But suppose Junior starts a four-day filibuster just before his bedtime.

What with EPIC, the Townsend Plan, and now \$30 Every Thursday schemes in California, don't be surprised if they start melting down and minting the Golden Gate.

There is much talk about plans to "deadend" the major league baseball. To which Hank Greenberg probably retorts, "Whadaya mean, deadend?" Hank has been killing it all year.

Salesmen's Crusade

V. L. Fulcher of the W. G. Walz Co., distributorship for Frigidaire, RCA Victor, and Easy Washers in El Paso, Tex., notes that the National Salesmen's Crusade ("Sales Mean Jobs") is GETTING AROUND.

In proof he sends us a clipping from the El Paso Herald Post of a Consumers Ice Co. advertisement plugging the merits of ice refrigerators. Occupying a prominent position in the advertisement is the round "Sales Mean Jobs" insignia of the National Salesmen's Crusade.

And B. T. U. will wager that George Mason of Kelvinator, who started the crusade, will be first to welcome an ice company into the ranks.

'Cooperation' Keeps Prices and Dealer Morale High In Kansas City, Mo.

Editor's Note: Kansas City, Mo. has been one of the bright spots in the 1938 electric refrigeration merchandising picture. Sales have been below 1937 marks, but there has been no resort to tactics which "cut the bottom out" of the retail market, as has been the case in some other cities when dealers saw sales slipping away.

To find out why, the News went to G. W. Weston, secretary-manager of the Electric Association of Kansas City. Mr. Weston's explanation of the common-sense cooperation which has kept Kansas City's refrigeration slate clean, in the face of a 20% turnover in dealers and a 51% turnover in salesmen, appears below, in interview form.

Reporter: "Mr. Weston, I understand Kansas City was one of the bright spots this year in electric refrigeration business—by that I mean market stability, no chiseling, good profits, etc."

Weston: "Well, it was not altogether that way, but from reports of traveling representatives, we understand that conditions here were much better than in most places."

Reporter: "How do you account for that?"

Weston: "The old simple story of cooperation."

Reporter: "Explain, please."

Weston: "Well, we have had the Electric Association here for many years. That means 150 firms plus 230 individuals working together in the interests of better business and better service to the public. Getting men together, and better acquainted with each other, is the foundation stone of any cooperative effort. You have to have that as a starter."

Reporter: "Where do the electric refrigeration dealers and distributors fit into that picture?"

Weston: "They are separate groups with no formal organization or constitution and by-laws. Each group merely has a chairman, and they operate as they please. I act as a sort of secretary to all such local electrical groups, calling meetings."

(Concluded on Page 2, Column 1)

Chicago Cooling Jobs Set Record Load In August

CHICAGO—Combined capacity of central-station air-conditioning installations sold in Chicago during August established a new all-time record of 650 hp. for the month, according to reports compiled by Commonwealth Edison Co., Chicago utility company.

This compares with 405 hp. record set in July.

(Concluded on Page 16, Column 3)

... And What Do You Think They Sell?



These Minneapolis salesmen for the Northern States Power Co. started "Electrical Appliance Day" in the National Salesmen's Crusade with a block of ice. The ice was given to the first person with whom they closed an electric refrigerator sale, and represented the last block of ice that the buyer would find coming in the back door. Left to right, the salesmen are: W. W. Woodward, F. K. Middimist, George Kraft, M. C. Vangen, and F. A. Suss. (See story on page 2.)

Advertising Records In Air Conditioning Given For 6 Mo.

DETROIT—Eighteen manufacturers of air conditioning, commercial refrigeration, and ventilating equipment spent \$316,103 in advertising their products in popular magazines during the first six months of 1938, an analysis of advertising expenditures made recently shows.

This compares with expenditures of \$869,828 by 19 manufacturers of similar (and some winter air conditioning) equipment during 1937, and of \$506,338 by 12 makers in '36.

Figures reported in the survey do not cover advertising expenditures in trade publications.

Advertising expenditures for the (Concluded on Page 10, Column 1)

Salesmen's Union Hits Combination Sales as Cut-Price 'Loophole'

MILWAUKEE—To prevent dealers from getting around the trade-in provisions in their contracts with Local 1343 of the Household Furniture Sales and Service Men's Union by offering another appliance below list price in a "combination deal," radios and all plug-in appliances were brought under provisions of the contracts, effective Sept. 12.

As originally written, the contracts merely established trade-in allowances for major appliances, and prohibited excessive cash discounts and premiums. Latest action is designed to stop sale of a radio, electric mixer, roaster, or some other plug-in appliance at less than list in combination with a refrigerator.

A schedule of guaranteed wages ranging from \$15 to \$40 a week, and based upon a salesman's past performance, was attached to the contracts.

(Concluded on Page 4, Column 1)

Herrlich Transferred To N. Y. Kelvinator Branch

WASHINGTON, D. C.—Charles Herrlich, sales manager of the Washington, D. C. branch of the Baltimore-Washington direct factory operation of Kelvinator division of Nash-Kelvinator Corp., has been transferred to the New York City branch of the company, effective Sept. 1.

In New York City, Mr. Herrlich (Concluded on Page 16, Column 3)

NY Dept. Store Reports Results Of 'Blue Book'

Plan's Operation Involves Use of Index and Finding Market For Used Units

NEW YORK CITY—Abraham & Strauss department store traded for 46 used electric refrigerators at prices ranging from \$4 to \$45 in the first five weeks after it began its refrigerator trade-in plan, reports Herman Hantober, compiler of the "National Market Index" refrigerator appraisal book, which the store is using as a guide in setting trade-in values.

Under the plan with Abraham & Strauss, Mr. Hantober has arranged to find an outlet for the trade-ins which the department store accepted. All units traded for so far have been taken over by Interstate Refrigerator Corp. of New York, which has (Concluded on Page 4, Column 4)

Densmore & O'Harra Back To Old Jobs

DETROIT—Announcement by Vice President P. B. Zimmerman of the appointment of Glenn O'Harra as eastern sales manager of the Norge division of Borg-Warner Corp. and of R. E. "Denny" Densmore as western sales manager marks the return of these two veteran executives to the posts in which they made a name for themselves through the leading roles which they took in building the Norge distributing organization.

Mr. O'Harra will have charge of the territory east of Chicago, and (Concluded on Page 16, Column 4)

EH & FA Financing Plan Mapped For Knoxville

KNOXVILLE, Tenn.—A plan by which purchasers of electrical appliances may pay for the merchandise on their monthly electricity bills with an extra charge of only 5% a year is being arranged here by Electric Home & Farm Authority.

The government bureau already has a contract with the Tennessee (Concluded on Page 16, Column 1)

WPA Competition With Contracting Business Keeps Down Wages, Distributor Charges

By Henry Knowlton, Jr.

TOLEDO—"Government projects are in active competition with private industry today," asserts Neil S. Larsen, distributor of Airtemp air-conditioning equipment in the northwestern Ohio area.

Basis of this assertion is the fact that WPA projects buy materials direct, and then install the job with WPA labor. Mr. Larsen believes that this practice is not only holding back private enterprise, but is holding down wages.

"It would be better for the taxpayer if the government would let contracts for WPA work to private firms," Mr. Larsen said. "We would do the work for less money because our entire operation would be more efficient. At the same time we would pay standard union wages, instead of handing out a 'dole' to our men. I am convinced that we could do the work on these projects cheaper than the government is doing it, even on a cost plus basis."

"There have always been three million unemployed in this country

and the chances are there always will be. These people must be subsidized by the government, but it is not necessary to penalize private enterprise to do it. The relief load can be taken care of without getting it all mixed up with the operation of legitimate private business.

"On the WPA work we are doing the myriad reports that must be filed with the government are a nuisance. We have to show where we purchase all materials, and file a complete payroll record of the operation each week. This work takes the services of a full-time employee in our organization.

"In addition, the payroll taxes which we must pay, account for a major portion of our overhead," Mr. Larsen continued. "The best markup that can be expected in our business today runs between 20 and 30% gross. Of this we must pay nearly 10% to the government. These payments include Workmen's Compensation Insurance, Public Liability (Concluded on Page 16, Column 2)

Kansas City Dealers Determine Their Problems, Then Act Cooperatively

(Concluded from Page 1, Column 2)
ings as they desire, getting out an occasional helpful (I hope) bulletin, and assisting them in whatever ways might be helpful."

Reporter—"Do they all belong to the Electric Association?"

Weston—"All the distributors do, and most of the dealers, but that has no bearing on the fact that my services are available in any way, or for any electrical group where constructive industry, or public service can be rendered."

Reporter—"Well, let's get down to the meat of this matter. How was chiseling curbed?"

Weston—"Through efforts of former years, dealers and distributors knew the results of both chiseling and little chiseling. No selling had to be done on that. So, it was purely a question of the degree of cooperation and fair play that could be established and maintained among the dealers. The latter met a few times at night to keep better acquainted with each other, hear constructive talks, and hold discussions on profit-making, better salesmanship, etc."

"The distributors held a series of 7:30 breakfast meetings, at which time shopping reports, made two or three times a month on the dealers, were reviewed."

Reporter—"Who made these reports, and who paid for the service?"

Weston—"A professional shopping bureau. The Electric Association donated the cost in the interest of protecting dealer profits, salesmen's commissions, and better service to the public."

Reporter—"What was the nature of the reports?"

Weston—"They not only showed what kind of offers were being made by dealers, but were an indication of that most important quality—salesmanship. The salesman's appearance, approach, sales tactics, closing efforts, etc., were all indicated on the report."

"Each dealer received a copy of the reports on him, so this was a very helpful service to both dealers and salesmen. And the distributors reviewed the reports at their meet-

ings; then, later, discussed them with their dealers."

Reporter—"What happened when the reports showed a certain dealer or salesman was chiseling?"

Weston—"If a salesman—the distributor selling that dealer asked the latter to talk to the salesman and explain that no one could expect to have an unfair advantage over another for a very long period of time."

"If a dealer—then the distributor tried to show him the advantages of competing on a clean-cut, fair basis with the other dealers. They all realized that if market demoralization started, it meant, in the end, crippled dealers, demoralized salesmen, and a bitterness that would require a long time to mend."

"And with all this—distributor losses, poor salesmanship, loss of public confidence, poor service to customers, the consequent hiring and training of new salesmen, and the setting up of new dealers by the distributors."

Reporter—"By the way, what all was involved by the term 'chiseling'?"

Weston—"The dealers themselves had an understanding, which they called a fair trade practice code. By it, there should be (1) no discounts for cash, as the established price was the cash price; (2) no icebox allowances, as cost records proved that simply could not be done without sacrificing legitimate profits; (3) no breaking down of another deal already signed up; (4) no sharing of salesmen's commissions with customers; (5) no premiums of any kind; (6) all refrigerators to be plainly marked with the year, model, and price."

"These are things that dealers in every town want, but they cannot expect to have them, to any degree of success at all, without an earnest effort to get them. Wishing, and having, are two entirely different things."

Reporter—"I've heard something of your cooperative time-payment plan. What about that?"

Weston—"The Electric Association and K. C. Power & Light Co. have a time-payment plan with certain advantages over other plans in down payments, long terms, collections on the utility bills, and limited dealer recourse. The finance company made it plain at the start that they would not cooperate with any chiseling dealer; in other words, they were interested only in dealers operating on a profitable basis, who expected to stay in business, and serve their customers properly. That policy in itself is a measure of control over dealers."

Reporter—"How about campaigns or special activities?"

Weston—"From time to time we have a sales-stimulator activity of some kind. And, in the spring, over 100 dealers and salesmen were given special sales training by L. L. Perry, a man who proved remarkably successful in this work."

Reporter—"Have you any idea what the anti-chiseling efforts have saved the dealers in money?"

Weston—"Based on monthly sales

reports that the distributors send to me, I would estimate, conservatively, that the dealers' and distributors' efforts on fair merchandising will mean about \$35,000 in additional net profits this year to the dealers. Based upon 80 dealers, that is an average of almost \$440 per dealer, which is certainly worth going after in any man's town."

Reporter—"What about dealer turnover?"

Weston—"Almost 20% of the dealers who were selling major electrical appliances the beginning of this year are not now selling them; half of these were specialty dealers who closed out their business; the other half were larger stores that discontinued their electrical appliance business, not finding it worth the time and effort in terms of profit gained."

"How this compares with other cities, I don't know. We think it's too high. There is no question but what the retail appliance business has been hard hit this year, due mainly, of course, to a lack of public buying. The dealers complain of too many persons buying from wholesalers at discounts, inadequate margins, inability to get and keep good salesmen, and, of course, lack of public buying."

"We have the facts on major appliance salesmen turnover—the loss has been 51% so far this year, with almost as many new salesmen hired in place of those leaving. We think that is too high, and are studying this question of dealer and salesman turnover to see if some measure of remedial action can be worked out."

"Even so, the anti-chiseling program that we were discussing has helped, we know, in retaining good salesmen and dealers. With a resumption of public buying, conditions will be wonderfully improved, in every respect, as there is already a splendid foundation of cooperation and understanding in sensible and sound merchandising."

Clothing Store Proprietor Demonstrates His Faith In Air Conditioning

PATERSON, N. J.—Mike Kronner, oldest of the four brothers who operate Kronner's men's clothing store here, believes in air conditioning.

Kronner's completely air-conditioned store was destroyed by fire last year, and the new store, which is modern in every respect, is equipped with a new Carrier air-cooling system.

The system consists of a Weather-maker which operates at 6,000 cu. ft. per minute supplying year-around conditioning. During the summer, 1,000 c.f.m. of outside air is supplied to the system.

A 15° differential is maintained from 95° outside and a 50% relative humidity is calculated on an outside wet bulb of 75°.

Mike Kronner says that he would never attempt to work again in a store that did not have an air-conditioning system.

Jersey Utility Sales From Employees' Leads Increase

NEWARK, N. J.—Leads turned in by load-building employees of Public Service Corp. of New Jersey not regularly engaged in selling work resulted in the sale of 7,190 electrical and gas appliances during the first six months of this year, a gain of 169 or 7.7% over the same period of 1937, according to company reports.

A total of 34,076 leads for electrical and gas appliances were turned in by employees, an increase of 19.1% for the half-year period as compared with the same months last year.

Minneapolis Dealers Beat \$50,000 Quota In One-Day Drive

MINNEAPOLIS — United effort, plus the impetus of night calls, enabled Minneapolis electrical appliance dealers to pass the quota of \$50,000 in sales set for the special "Electrical Appliance Day" during the recent National Salesmen's Crusade here, without resorting to bargain specials or price cutting.

And the enthusiasm generated in the one-day drive has kept sales above normal since that time.

In Minneapolis' "Sales Mean Jobs" campaign, each industry was assigned a special day, on which advertising and publicity would be trained on it. Electrical Appliance Day was Aug. 17.

Handling activities for the day was a committee composed of Earl Sharpe, Graybar Electric Co.; William A. Ritt, secretary-manager of Minnesota Electrical Council; A. H. Kessler, promotion manager of North Central Associated Electric Industries; T. L. Losby of Northern States Power Co.; and E. G. Beecher, president of the Electric Appliance Dealers' Association.

HOW IT WAS PROMOTED

Dealer association sponsored four 750-line advertisements, which ran the day before and the day of the drive. In addition, dealers ran about 5,000 lines of copy on their own products, giving the cooperative insertion center position and grouping their individual announcements around it.

Northern States Power Co. supplied large banners for dealers' windows, and the distributors' association furnished dealers with tags printed in two colors, showing the number of "man-days" of work entailed in each of the various appliances concerned in the drive.

Dealers also were supplied with special mailing pieces, which were sent out to all active prospects the day before the drive, urging them to buy on Electrical Appliance Day.

In preparation for the event, distributors held an evening meeting with their dealers and salesmen and set individual quotas for the day's efforts.

Each salesman was pledged to make two calls after 6 o'clock at night. Entire retail sales quota for the day was set at \$50,000, approximately four and one-half times the average daily volume.

SALESMEN KEEP GOING

Night calls put the drive over the top, for a check of dealers at 4 p.m. showed not quite 50% of the day's quota as written. Final check, early the next morning, showed that the extra effort had proved the quota-breaking factor.

"Most dealers felt there would be a considerable letdown on the part of salesmen in the days immediately after the special campaign," Mr. Ritt said, "but the contrary was the case. With his extra night calls, the salesman had developed a number of new prospects, which he felt could be closed during the general sales crusade drive."

No "specials" or bargain prices were made the day of the special drive. Merchandising efforts were confined to selling regular models at regular prices. It was straight up-and-up selling all the way.

As a special stunt, Northern States Power Co. gave each of 11 outside refrigerator salesmen a cake of ice, with instructions to give the ice to the first person with whom they closed a sale. Ice was delivered with the reminder that it was the last time old-fashioned refrigeration methods would be used.

Stipulation Made By Sparks-Withington on Refrigerator Copy

(Following is the text, just released, of the stipulation entered by Sparks-Withington with the Federal Trade Commission.)

The Sparks-Withington Co., a corporation, Jackson, Mich., vendor-advertiser, is engaged in selling refrigerators designated Sparton refrigerators, and in advertising represented:

"Do you know that the U. S. Bureau of Standards reports that % of an inch of frost on the coils of your refrigerator has the same insulating effect as 3 inches of granite."

"Don't buy an electric refrigerator until you see the new Sparton equipped with the enchanted clock. It makes Sparton the only 100% automatic refrigerator on the market today."

"With its 20 to 30% greater economy and its more efficient food preservation, the new Sparton actually helps to pay for itself in the electricity and food it saves."

"This % inch of frost actually cuts down the cooling effect of the refrigerator 30%."

The respondent hereby admits:

That the U. S. Bureau of Standards has not reported that % of an inch of frost on the coils of a refrigerator has the same insulating effect as 3 inches of granite, nor has the bureau ever published any comparison of the insulating values of frost and granite;

That the Sparton refrigerator is not 100% automatic, being automatic from a refrigerating standpoint only and not as to all mechanical operations;

That the Sparton refrigerator does not:

1. Have 20 to 30% greater economy than all other types of refrigerators;
2. Have more efficient food preservation than any other electric refrigerator;
3. Help pay for itself in the saving of electricity and food except as compared with certain other units of refrigeration which have been definitely proven to be more costly to operate or less effective in preserving food;

That the extent by which the cooling effects of a refrigerator is reduced by the accumulation of frost cannot in all cases be accurately determined.

In a stipulation filed and approved by the Federal Trade Commission the vendor-advertiser admits making such representations and agrees in soliciting the sale of and selling said product in interstate commerce to cease and desist from representing:

(a) That the U. S. Bureau of Standards reports that % of an inch of frost on the coils of a refrigerator has the same insulating effect as 3 inches of granite, or that the Bureau of Standards has published any report showing comparison of the insulating values of frost and granite;

(b) That the Sparton refrigerator is 100% automatic unless such representations are limited to its mechanical units that are in fact automatic, and not to all mechanical units;

(c) That the Sparton refrigerator: 1. Has greater economy by any definite per cent unless the type of refrigerator to which the Sparton refrigerator is compared is stated, and unless such per cent is substantiated by reliable tests;

2. Has more efficient food preservation unless the type of refrigerator to which the Sparton refrigerator is compared is stated and unless such statement is substantiated by competent tests;

3. Helps to pay for itself in the saving of electricity and food, except as compared to other types of refrigerator units that have definitely proven to be most costly to operate or less efficient in preserving food;

(d) That frost lessens the cooling effect of a refrigerator by any definite per cent;

And from making any other claims or assertions of like import.

You Can Install
SPORLAN
THERMOSTATIC
EXPANSION
VALVES
with Confidence!

KERO TEST
Valves and Fittings
The Standard of the
Industry
Kerotest Manufacturing Co.
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The individual analysis tag on every Ansul cylinder is but final evidence of the scientific checking that has followed every step in the production of Ansul chemicals.



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precise step-by-step
analyses, guarantees
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THERE IS AN ANSUL DISTRIBUTOR NEAR YOU

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Copeland Household Refrigeration

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Both products of 20 years experience. Both recognized by experts as the "last word" in modern refrigeration—efficient, thrifty, long-lasting. Write today for facts about either or BOTH of these Copeland Profit Opportunities.

COPELAND REFRIGERATION CORPORATION
Sidney, Ohio

WEATHERHEAD
Refrigeration Valves and Fittings
A complete line in
SAE and Inverted Types
THE WEATHERHEAD CO. CLEVELAND, OHIO

Air Conditioning

Sales Volume In Air Conditioning and Commercial Refrigeration Keeps Staff Of Toledo Contractor At Full Strength

By Henry Knowlton, Jr.

TOLEDO—Air conditioning and standard commercial refrigeration have been responsible for keeping 50 men on the payroll of the Howard Baker Co., Carrier distributor here, during the last year.

After 20 years of experience in the heating and piping business, Mr. Baker finds that the sale of air conditioning and commercial refrigeration has become the salvation of his business.

The company employs one commercial air-conditioning salesman who has an interest in the business, one commercial salesman, and four winter air-conditioning salesmen, two of whom spend their entire time on replacement business.

DOES SHEET METAL WORK

Sheet metal work is done by the Baker Co. as Mr. Baker found that subcontracting a considerable volume of work did not prove entirely satisfactory. The result has been that the increased business in the air-conditioning and refrigeration field has kept a large force of mechanics busy for the past two years.

Sale of industrial and commercial refrigeration equipment is handled for the Baker Co. by Hugh Martin, who was formerly connected with the Kelvinator distributor in Houston, Tex.

Handling the complete Carrier line, Mr. Martin asserts that "there is nothing known to the refrigeration or air-conditioning industry that we do not have to sell." The result has been a broad coverage of the existing market, from beer cooling in taverns to industrial banana storage.

In addition to a large number of restaurant and bar installations the Baker Co. has installed commercial refrigeration equipment in several packing houses for the purpose of aging, storing, and curing meats. Packing house installations made during the current year include The Provo Co., 7 hp., Seydors, 7½ hp., Toledo Meat Co., 3 hp., Flechtner Bros., 10 hp., and the Adrian Meat Co., 4 hp.

BANANA ROOM JOB

Ten tons of Carrier Freon equipment was installed in the plant of the Banana Distributing Co. Cold diffusers are used to control the temperature of banana ripening rooms, so that the fruit will not ripen too rapidly during warm weather. Winter temperatures are also under close control.

One of the largest commercial installations in the city of Toledo was made by the Baker Co. in the new Vocational High School. Equipment used in the building includes two 35-cu. ft. refrigerated cases, and one 85-cu. ft. reach-in refrigerator.

Typical of many restaurant installations made by Mr. Martin is commercial equipment serving the Ka See Night Club which is located on the outskirts of Toledo. One Carrier reach-in refrigerator and one Peerless ice maker are powered by a ¾-hp. Carrier compressor located in the basement of the building.

In the second floor cocktail grill beverages are kept at the proper temperature by a Carrier 3BC3 refrigerator, which has a built-in ½-hp. compressor.

BOOM IN COMMERCIAL

When Hugh Martin started work with the Baker organization early this year, the company had no volume of commercial refrigeration work. Toledo was a strange town. Starting out with a modest \$2,000 gross the first month, Mr. Martin built up the department to a volume in excess of \$6,000 a month.

As a result of this showing, Mr. Baker, who is active head of the business, stated that "Martin's department will do in excess of \$200,000 in Carrier commercial next year."

Hugh Martin asserts that a real knowledge of keeping, cutting, and handling meat is the most valuable asset that a commercial refrigeration salesman can have.

"It is necessary to understand the customer's problems and get on a working basis with him," he asserts. "Down in Texas I learned a good deal about meat, as it is a big business there. Customers here in Toledo are interested in how the big operators handle meat in the southwest."

"Speaking of 'getting in' with the customer—one of the best commercial salesmen I have ever known was a man who made a practice of going behind the counter, putting on a white apron, and cutting meat with the owner of the store. He did this for several days before attempting to make a sale," Mr. Martin said.

"During this time he was able to get an intimate picture of the prospective customer's business and get well acquainted with him. These tactics would invariably result in a sale."

DON'T BE 'HIGH HAT'

"Further, I have found that the 'high-hat' type of salesman can never make a success of selling commercial. One time I went out with a salesman to help him on a beer-cooling sale. The salesman ordered a glass of beer—took a swallow, which he promptly spit out on the floor. With several remarks to the owner about how lousy the beer was, he then tried to sell beer-cooling equipment."

"It was necessary for me to get the salesman out of the place, to give the owner a chance to forget the incident, and then go back and make friends with him to get his business."

"You can't get anywhere by telling the customer what is wrong with his business, but must show him, in a friendly way, how his business can be improved. Nothing can be gained by insulting a customer at the start even if his beer is too warm to drink and too flat to be palatable."

FIND NEW MARKETS

Asked about the next big field for refrigeration, Mr. Martin said that the biggest volume would be sold in packing houses, farm markets, and locker storage plants.

"When I came to Toledo I found that no one had been paying much attention to the small packing house field. By getting acquainted with the packing house men and their problems we have been able to do a fine volume of business."

"Farm markets, where the meat is butchered and sold retail, are springing up in many places. In certain cases these will be combined with locker storage plants, as is the case of the farmer's cooperative project at Celina, Ohio, which combines milk cooling, locker storage, and the sale of meats at retail."

"There is one locker storage plant in operation in Toledo now, in connection with the Great Lakes Terminal Warehouse, and we expect to do a large volume of locker storage business next year, as we know of a number of men who are interested in putting up the money for plants."

Representatives Named For Blower Line

NEW YORK CITY—Appointment of Kister Engineering Co., Indianapolis, and Industrial Equipment Co., Houston, Tex., as representatives for its complete line of blowers has been announced by L. J. Wing Mfg. Co. here, makers of heating and ventilating equipment.

H. L. Kister is head of Kister Engineering, and J. E. Brown manages Industrial Equipment.

'New Yorker' Investigates Manhattan's Well Water Supply, Finds It Scanty

NEW YORK CITY—That well-water is not generally available for use in refrigeration and air-conditioning systems on the island of Manhattan is pointed out in "The Talk of the Town" section of the New Yorker magazine in the issue of Aug. 20, 1938.

Although the advertising columns of this polished smartchart have long exhorted visitors from the provinces to dine in the Persian Room at the Plaza (air conditioned—always cool and comfortable), live in an air-conditioned room at the St. Regis, and see the latest Broadway hit from a comfortable seat in an air-cooled theater, this is the first time the industry has received editorial attention.

The magazine reports that "every spring for the past five or six years, a number of hopeful property owners on Manhattan Island have ordered test borings for wells on their land. The reason for this is the increasing demand for air conditioning, which requires a tremendous flow of water—a movie cathedral's plant, for instance, uses 400 gallons a minute."

"The American Telephone & Telegraph Co. is the lucky possessor of a well capable of producing 250 gallons a minute. This well is under the building at 32 Sixth Ave., which houses their long distance department. In the summer it supplies the air-conditioning plant, at a cost of approximately \$30 a day. The same

amount of city water would cost \$48 a day. At that rate, a well soon pays for itself."

"Besides economy there's another strong argument in favor of wells: the spread of air conditioning may some day reach a point where the city will be forced to budget the municipal water supply."

"Unfortunately there are no good wells in the parts of town where air conditioning is most in demand. London Terrace and Longchamps Restaurants have made test borings without success. The big movie chains are, of course, interested, but their geologists' reports have discouraged them from making test borings."

"In 1935 Madison Square Garden sank a well 200 ft. below the floor of the boiler room, which resulted in a modest trickle of 15 gallons per minute. The Garden rests on the bed of a filled-in stream, usually a good spot for a well. The drilling engineers are inclined to think that construction of the Eighth Ave. subway somehow diverted the water."

"There are about 40 wells now in use on the island, concentrated in three districts: the lower East Side, around First and Second Aves. and Mott, Pearl, Mulberry, and East Houston Sts.; and Manhattanville, in the region of Broadway and 125th St."

"The domestic use of well water is forbidden by a Board of Health order dating back to 1884. The city

will analyze wells for nothing and tell you if they're safe for industrial use. They all are, in New York."

"Sheffield's uses well water for pasteurizing milk, several candy factories cool their fudge with it, and one fortunate garage is able to wash its clients' cars in well water."

"It takes between two and three weeks to drill a well on Manhattan, costs between \$10 and \$20 a foot, and requires a thousand dollar pump to keep the water flowing. Artesian wells, whose waters flow to the surface of the ground without pumping, are unknown in New York."

Mason Joins Advertising Staff of Westinghouse

MANSFIELD, Ohio—Appointment of William R. Mason to the advertising staff of the merchandising division of Westinghouse Electric & Mfg. Co. has been announced by Roger R. Bolin, merchandising manager of the company. Mr. Mason will be located at merchandising division headquarters here.

His immediate responsibility will be that of supervising the advertising activities pertaining to residential and commercial air conditioning. Prior to joining Westinghouse, he was with Fuller & Smith & Ross, advertising agency, working on air-conditioning and commercial refrigeration accounts.

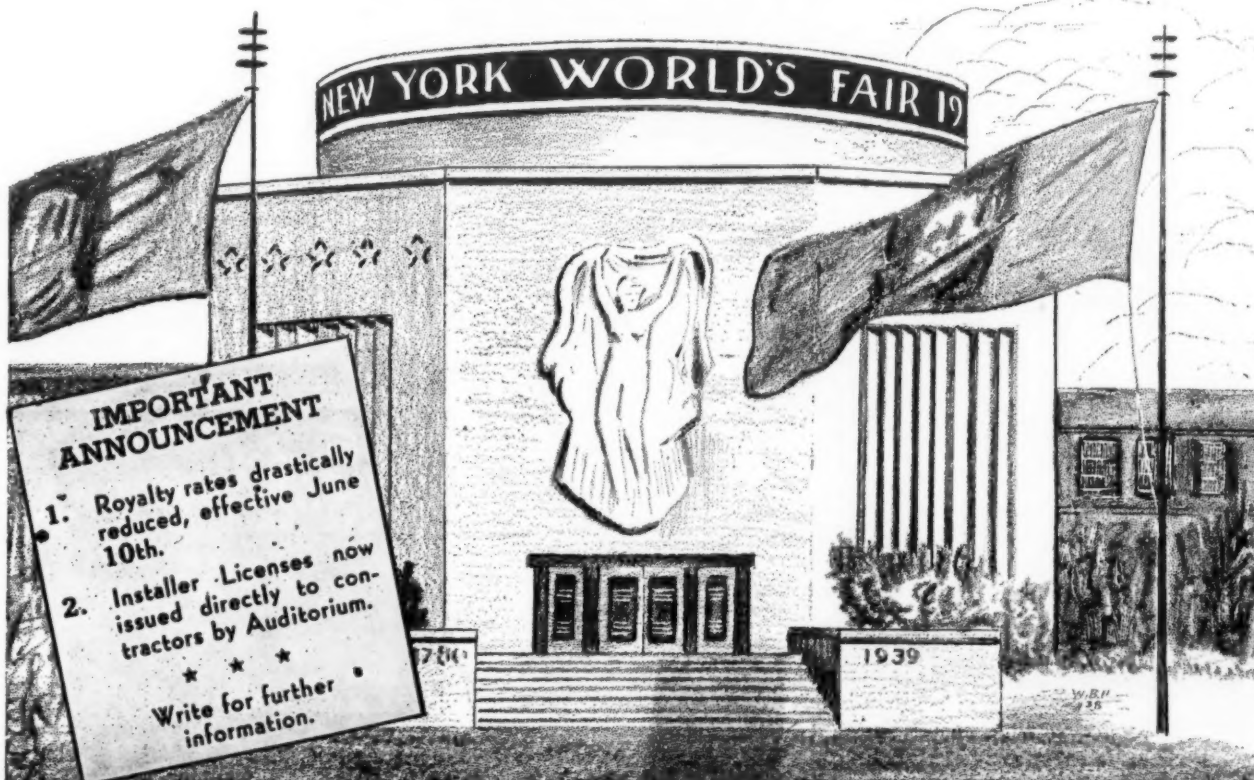
Mr. Mason has had several years of newspaper and advertising experience. A graduate of Miami (Ohio) university, he worked on the Hamilton (Ohio) Journal and was for several years assistant advertising manager of the Estate Stove Co.

AUDITORIUM SYSTEMS

are satisfactory for service at the
New York World's Fair 1939

In this wonder city, only the most advanced methods for Air Conditioning could be considered. Significant, then, to architects, engineers and all others interested in modern air conditioning is the fact that for a number of the key buildings at the Fair already completed, AUDITORIUM Air Conditioning Systems have been installed. Similar patented systems, with all their proven advantages, including economical operation, are available to installers everywhere at the new 1938 reduced royalty rates. Write us or any of our Licensees.

AUDITORIUM CONDITIONING CORPORATION
17 East 42nd Street, New York, N. Y.



Distributor-Dealer Doings

Milwaukee Salesmen's Union Revises Trade-In Plan and Hits 'Mixed' Sales

(Concluded from Page 1, Column 4)
dealer-union contracts Sept. 1.
(See AIR CONDITIONING & REFRIGERATION NEWS, Aug. 31).

Explaining the need for revising trade-in provisions and inclusion of all appliances under present contracts, H. J. Burbach, business representative of the union, declared there have been cases where a mixer or other plug-in appliance listing at more than \$20 has been sold for \$5 in connection with sale of a refrigerator or other major unit.

Sale of the major appliance was in line with contract provisions in that it was sold for list price, the proper trade-in allowance was given, and no premium was tendered the customer.

REVISE TRADE-INS

The new trade-in schedule lowers the maximum allowance for ice boxes from 8% of the list price of the electric refrigerator being sold to a flat \$5, and there are to be no ice box trade-in allowances granted on electric refrigerators other than current models.

The old schedule allowed a 10% allowance on "orphan" used mechanical refrigerators and on lately developed, insulated, and "air conditioned" ice refrigerators, and a 15% allowance on used mechanical refrigerators of models prior to 1933.

To provide a more flexible trade-in policy on merchandise that need not be junked but that has substantial re-sale value, the new contract schedule provides for an Appliance Exchange Bureau which is to approve allowances on such appliances. The dealer is to call the Bureau and gain approval of the allowance he sets before completing the sale.

The Bureau, Burbach explained, would only figure in a transaction between a dealer and his customer when the customer offered as a trade-in an article that could be resold, and when the new appliance being purchased by the customer was one on which a trade-in allowance could be granted under terms of the contract.

OPERATION OF BUREAU

In the case of ice boxes other than modern insulated models, and where the schedule sets a maximum \$5 allowance when taken in on current model electric refrigerators, for example, the Bureau would not be called, nor would it in a transaction involving sale of any of the following appliances on which trade-in allowances are prohibited: gas ranges and washers listing under \$59, radios listing under \$29, ironers, dishwashers, disposal units, or small appliances, except those on which an allowance is set up by the distributor or manufacturer.

Operation of the Appliance Exchange Bureau, Burbach explained, should correct a condition complained of by some dealers, who declared they were losing "plus business" under the old contract provisions.

A dealer making a sale of a refrigerator to a customer who a year earlier had made a sizeable investment in a gas range was unable to

replace the gas range with an electric range, because of the inflexible operation of the old trade-in allowance schedule, although the old range had a substantial re-sale value and the dealer could well afford to make a concession because the sale would have included two major appliances.

Under the old schedule, which has been effective since March 10, a \$10 maximum allowance was established on electric ranges carrying a list price of less than \$100; a \$15 allowance on electric ranges carrying a list price between \$100 and \$200, and \$20 on electric ranges listed at \$200 and over.

These provisions are replaced with the Appliance Exchange Bureau plan, under which an allowance for the gas range more in line with its actual value will be set.

The contract prohibits premiums or free gifts by the dealer unless, as special deals, they are announced on a national basis by the manufacturer. No discounts are to be allowed, except that a 1% discount may be allowed for cash within 90 days, and a 2% discount for cash in 30 days, to meet trade-stamp competition.

Minimum financing charge is set at 6%.

Another addition to contracts made last week provides that, "upon request of the union," the dealer agrees not to purchase merchandise from any individual, firm, or corporation who does not have a contract with the union.

Mattoon, Ill. Dealer Has A New Showroom

MATTOON, Ill.—The H. W. Clark Co., which formerly had no downtown outlet here, has established the Automatic Heat Co. at 109 S. 19th St. where a complete display of automatic heating equipment is being maintained.

Horace P. Clark is manager of the store, and is assisted by B. H. Haddath. Marion Smith is mechanical superintendent.

Products handled include Iron Fireman automatic stokers, National Radiator Co.'s stoker-fired boilers, and Hart oil burners.

Walter Murdoch, Biloxi Dealer, Is Dead

GULFPORT, Miss.—Walter G. Murdoch, Frigidaire factory dealer on the Mississippi gulf coast with headquarters in Biloxi, Miss., died of a heart attack here recently while playing golf. Mr. Murdoch formerly was connected with Frigidaire in Birmingham.

Installation Made for Idaho Shoe Store

TWIN FALLS, Idaho—Detweiler Bros., Inc., installed Frigidaire air conditioning in Hudson-Clark's, which opened recently as Twin Falls' only air-conditioned shoe store.

Brooklyn Dealers Told They Are Responsible For Price Cutting

BROOKLYN—Dealers are responsible for all the radio price cutting in the New York metropolitan territory today, Percy Peters, chairman of the radio committee of the Electrical Appliance Dealers' Association of Brooklyn, Inc., declared at a recent meeting of the organization.

"All the big stores have toed the line on radio prices," Mr. Peters declared. "All the price cutting today is being done right here in this room."

At a meeting with radio distributors the night before the association meeting, Mr. Peters said, it was announced that shoppers had uncovered 73 price-cutting violations, 35 of them in the Brooklyn territory alone. Distributors have taken away 40 dealers' franchises, he declared.

The distributor report may have presented a somewhat exaggerated picture of the radio price situation, he added, since many of the violations were probably accidental rather than willful.

Urging members of the dealer association to adhere to price control recommendations, Mr. Peters asserted that "distributors spend a lot of money for price control, and that while dealers cried for it, now they don't seem to want it."

He warned that at next month's meeting of the association, names of all violators reported by distributors would be announced openly.

A motion submitted by Martin A. Tarzian, asking for revision of a plan for routing utility employee appliance business through regular dealers rather than discount houses, was passed at the meeting. Utility employees would be permitted a discount of 15% on refrigerators, and 20% on all other appliances, as in the original plan.

The association decided to adopt alterations recommended by E. F. Jeffe, vice president in charge of sales for Consolidated Edison Co. of New York, which would permit relatives of employees to obtain the established discounts. It also was decided to allow discounts on price-controlled products, if dealers so desire.

All utility appliance orders will be stamped "discount shown subject to acceptance of dealer."

The association will employ a full-time secretary and open a downtown office for a four-month trial period, it was decided, following an appeal by Thomas S. Forker, member of the advisory board.

Tom Bolger, formerly with Premier Vacuum Cleaner Co. and Times Appliance Co., was appointed to the new secretary's position under the trial arrangement.

J. E. Stephens Co. Moves Detroit Location

DETROIT—The J. E. Stephens Co., 450 W. Fort St., has moved to a new location at 5422 Second Blvd. here. Several model electric kitchens will feature the company's food service equipment display in the new building.

Wesco of Memphis Host At Dealer Meeting

MEMPHIS, Tenn.—E. A. McDermott, manager of the Memphis office of Westinghouse Electric Supply Co., was host to dealers and salesmen of Memphis and the Mid-South during a sales meeting held Aug. 18 at the Claridge Hotel. New models of Westinghouse radios and appliances were featured.

How Hantober Operates As Trade-In 'Agent' For a N. Y. Store

(Concluded from Page 1, Column 5)

paid the book value of the units direct to A. & S., Mr. Hantober says.

The Hantober appraisal book also is being used as a guide by Namm's department store, and in the week of Aug. 11, seven trade-in deals were closed, Mr. Hantober reports. Prices paid for trade-in units ranged from \$4 to \$31, and were disposed of to used refrigerator firms at regular book prices.

According to its arrangement with both department stores, the Hantober organization acts as an agent in finding firms interested in purchasing trade-in units from the stores, and does not purchase nor in any way handle the refrigerators itself.

In its resale dealings for both stores, no trouble has been encountered in obtaining the full appraised trade-in value for the various units, Mr. Hantober says.

Following is a list of used refrigerator purchases made by A. & S. under its trade-in plan through July 28:

Make	Price
AC Frigidaire sealed unit.....	\$15
AC PB-95 General Electric.....	29
AC Master 437 Frigidaire.....	45
5-cu. ft. G-E Monitor Top.....	15
5-cu. ft. Westinghouse.....	7
AC 5-cu. ft. General Electric.....	15
AC Apex Ribrel.....	12
AC 500 Mayflower.....	5
AC W6 Frigidaire.....	20
D4 Frigidaire.....	10
HE4 General Electric.....	20
Gibson.....	12
Apex.....	12
K-485 Kelvinator.....	30
4-cu. ft. Norge.....	10
A52 Copeland.....	10
AC 502-34 Universal Cooler.....	21
HE4 General Electric.....	15
AC K6L Kelvinator.....	23
EA5B Electrolux.....	7
AC W6 Frigidaire.....	20
AC V5AP Frigidaire.....	12
AC V5P Frigidaire.....	10
2-door Ellison.....	15
AC A411 Copeland.....	5
207 6-cu. ft. Majestic.....	15
AC 400 Bakin.....	15
AC S42 General Electric.....	10
AC 7-cu. ft. Buckeye.....	5
PK5 Kelvinator.....	15
V5P Frigidaire.....	5
A52 Copeland.....	12
S62 General Electric.....	18
HE7 General Electric.....	29
APV5 Kelvinator.....	12
K4 Kelvinator.....	17
WL45 Westinghouse.....	14
EA5B Electrolux.....	13
60S Grunow.....	4
EL5B Electrolux.....	7
N5 Copeland.....	4
4-cu. ft. Rice (unit on top).....	4
400 Mayflower.....	5
U5 Kelvinator (all porcelain gray and white).....	12
3-door porcelain ice refrigerator.....	4
N5 Copeland.....	4

Perry-Mann Sets Up an All-Electric 'House of Charm' In a Public Building

GREER, S. C.—An all-electric "House of Charm" has been built on the second floor of the commission of public works building here to demonstrate the advantages of modern electrical living.

Worked out by O. T. Lawing, superintendent of the commission, with the cooperation of his wife, members of his staff, and representatives of Perry-Mann Electric Co., General Electric distributor in this territory, the House of Charm is a full-size home, complete in itself even to an outside "yard" where garden floodlighting and Christmas decoration can be shown.

There are five rooms, fully furnished as though ready for occupancy, and the entire house is equipped with G-E radial wiring. Colonial in style, the house is built of bricks with white trim.

G-E unit room conditioner is installed in the living room, which is equipped with "Lightolier" crystal and silver fixtures, an electric clock, and an extension telephone providing private communication.

Dining room is wired for a unit

Carolina Power Offers Bonuses To Salesmen In September & October

RALEIGH, N. C.—Quota of 386 household electric refrigerators in September and 193 units in October has been set by Carolina Power & Light Co. for its regular company and dealer salesmen during the utility's two-month all-employee sales campaign which is now in progress here.

In addition to refrigerators, quotas of 700 electric ranges, 300 water heaters, 3,000 table cookery units, 200 space heaters, and 300 range units have been established for the drive, a system-wide activity during the two fall months.

Bonuses for both regular and volunteer salesmen are an added incentive in the drive. First prize of \$25 and second prize of \$15 is being offered for the salesman in each of two classifications who attains the greatest percentage of his campaign estimated annual revenue quota. A special prize of \$10 also is being offered.

Special bonus of \$5 is available to salesmen who sell a new electric range to replace an electric range five years or more old. Another special award of \$1 is being offered to refrigeration salesmen for each unit sold in excess of the individual salesman's quota set up for the month.

On electric water heater sales where the new unit replaces a side-arm or instantaneous electric model, a bonus of \$5 will be given to the salesmen.

First prizes of \$10 are being offered to both inside and outside volunteer salesmen who attain the greatest percentage of their districts' campaign quota.

In the commercial section of the campaign, a quota of \$10,186 in refrigeration and air conditioning, and of \$9,270 in cooking and heating equipment, has been established, with prizes of \$25 and \$15 for the two salesmen in this section who attain highest E.A.R. quotas over 100%.

McGee Succeeds Linard As General Manager Of Burns Radio

DAYTON, Ohio—Howard Linard has resigned as vice president and general manager of Burns Radio Co., local Crosley distributor, and has been succeeded by Roy B. McGee, R. J. Cooper, president, has announced.

Both Mr. Linard and Mr. McGee joined the company about 16 years ago.

CORRECT COILS

FOR LOCKER PLANTS

FOR CORRECT COOLING

Also makers of
REMPE Unit
COOLERS

REMPE CO., 340 N. Sacramento Blvd., CHICAGO
Also stocked by Leo Bosarge Co., 315 Spring St., N. W., Atlanta, Ga.

Rempe coils and pipe bends have back of them an efficiency experience of almost 50 years. That's why engineers make it a point to "ask Rempe" whenever there is a particularly tough problem of cooling, and when they want to be SURE of results. For coils or units that provide any temperature, to be used with any refrigerant, and for any size or type of installation, you'll do well to

Ask REMPE



M&E Compressors
EST. 1866
MERCHANT & EVANS CO.
Phila., Pa., U.S.A. Plant at Lancaster, Pa.

PENN Leads in AUTOMATIC SWITCHES AND CONTROLS
Write for Catalog
PENN ELECTRIC SWITCH CO.
GOSHEN, INDIANA

Specialty Selling Methods

Chandler Operation Is a Model For All Hardware Stores Handling Appliances

SYLVANIA, Ohio—The kind of a retail operation that every appliance dealer dreams of having is probably the best way to describe the Chandler Hardware Co. in this town of about 2,500 population.

No superlatives are necessary to describe how the store operates. A mere recital of the facts tells the story of what this hardware store has done and how such success was accomplished.

Last year Chandler's moved 200 refrigerators.

In the refrigeration business for nine years, B. W. Hittler (who heads up the refrigeration department of the store which is run by Roy Chandler) can recall but four repossessions.

SEVEN OUTSIDE SALESMEN

Seven outside salesmen are employed by the store—and they are really "outside" salesmen, working a territory with a radius of 30 miles, which extends into a number of surrounding small towns, rural areas, and the exclusive residential section which has grown up on the north-west side of Toledo (Sylvania lies about 10 miles north of Toledo proper).

In addition to the line of refrigerators, ranges, washers, and small appliances which the salesmen handle, they are privileged to sell anything which the store sells—or can get for a customer. In stating this, Mr. Hittler related a story which sums up this situation adequately.

"The other day a salesman ran across a farmer who was in the market for a corn binder. Our man wasn't an expert on farm machinery (Chandler's don't expect their men to be authorities on everything the store handles), but he gave the prospect what information he could and then brought one of us out to complete the deal."

Chandler's also has a tie-up with a Toledo furniture firm, so that the salesman can fill any need of the customer from a bedroom suite to a toaster, from farm machinery to a can of paint. Mr. Hittler says that some of their customers have bought practically everything but their food from Chandler's over a long period of years.

SALARY AND COMMISSION

Salesmen get a salary and commissions. Most of the men have been working with the company for some length of time.

Although Chandler's has been doing business in Sylvania for 48 years, and is probably known to practically everyone in the territory, the management doesn't give the public a chance to forget about the store and what it sells.

All types of sales promotion are used to keep the public informed of what the store is offering, and to make the job easier for the salesmen.

Perfectly spotted on a curve in the road that leads into Sylvania from Toledo is a billboard advertising the fact that electric ranges can be purchased at Chandler's. (The emphasis is on the product in this outdoor display.) Newspapers in both Sylvania and the surrounding towns are used consistently.

USE ADDRESSOGRAPH

Most impressive of the Chandler store's promotion efforts is its direct mail activities. Names of all householders who have established themselves as good customers during the store's 48-year tenure of business are on addressograph plates, filed alphabetically. There are 40 boxes of these plates, which means that the mailing list must comprise between 6,000 and 8,000 names.

Other elements of the mailing de-

partment, neatly tucked away in a space behind the appliance display which occupies one side of the store, are a multigraph machine and a table stacked high with the folders of a dozen or more manufacturers.

The Chandler Co. name and address is imprinted on the various promotion pieces that are sent out, and the multigraph machine is further used to prepare the hardware firm's own bulletins which are sent out to the customers at regular intervals.

HOW USERS SELL

The customers themselves help make a lot of sales for the store—and are well rewarded for their efforts. When a user turns in a name that results in a sale, he is given 3% on items selling at list up to \$100, and an average of about \$5 on merchandise which sells for more than \$100.

"However," explained Mr. Hittler, "the sale must actually be made within 90 days of the time in which the name is turned in, or this bonus to the user is not paid. This keeps us from getting the kind of a list which would merely include everybody on the street on which the user lives."

"Many of our old customers do more than just turn in the names," Mr. Hittler continued. "As an example of what I mean, one of them called up the other day to say that she had made a date for one of our salesmen to call upon a friend of hers who was interested in an appliance. So the salesman found a friendly reception awaiting him from a customer already half-sold when he made his first call!"

The Chandler Co. does its own financing of sales which are made on a time basis. The financing charge made is "7% straight bank interest."

BUILD ON SERVICE

Probably one of the most important elements in the Chandler Co.'s success has been the service which it gives its customers. By "service" is meant that kind of "service" which the customer thinks of—prompt delivery, quick and resultful attention to complaints, etc.; and also the kind of "service" that the term means in the refrigeration industry—keeping the unit in good working order.

The refrigeration service department is under the direction of Mr. Hittler. A complete shop is maintained at the Chandler Co. headquarters, and facilities are also provided to provide quick servicing in the field.

The service department is on its toes to justify the faith which customers have in Chandler's—the kind of faith that brings repeat business. Late one day recently a pair of service calls came from a far point in the territory which the Chandler Co. reaches. One of the customers preferred to have service call made the next day, the other one wanted the service man "as soon as he could make it."

DO IT 'THE HARD WAY'

Most individuals would have taken the easy way out, and waited until the next day to make both the calls. Chances are that the customer who wanted the service call quickly would have been satisfied if the call had been made early the next morning. But the Chandler Co. doesn't take that kind of a chance. Out went the service man that night on the one call, and back into the same area he went the next morning on the other call.

The Chandler store is nothing fancy to look at. But it has the clean, friendly atmosphere of a very first rate small-town hardware store. Somehow a colorful imitation porcelain store front and "modernistic" interior decorations would seem out of place, and might destroy the genial atmosphere which the store now creates.

One gets the idea quickly that the Chandler organization is always abreast of what's going on in the

business. A number of space heater models are on the showroom floor, and Mr. Hittler says that sales on this item have been going well. He further indicates that when the market for one item starts to slow down, the management is quick to search out another item of comparable unit sales price for their salesmen to work on.

Kitchen Planning Service Helps Salesman Start 63 Series of Sales

HOLLAND, Mich.—How the Westinghouse kitchen planning service helped him to sell \$750 worth of appliances in one week and start 63 series of sales in 24 months recently was related by Peter Prins of Meyer Music House here.

To illustrate how the service has helped him make one sale create others, Mr. Prins related that he presented a kitchen plan to a prospect some time ago and, at that time, sold the prospect a refrigerator. Since then, Mr. Prins declared, he has sold to this same customer an electric range, a water heater, a vacuum cleaner, three radios, a piano, and a "food crafter," total price being \$1,079.

COMPANY DRAWS PLANS

Under the Westinghouse kitchen service plan, Mr. Prins sends the measurements of a prospect's kitchen to company headquarters along with \$1, and receives an individual kitchen plan with blueprints and a colored drawing.

The planned kitchen is based on three principal centers, and is designed to minimize walking, reaching, and effort on the part of the housewife.

Mr. Prins stated that in addition to providing him with this regular service, the Westinghouse kitchen planning department gives him a perfect opportunity to win his prospects' confidence, and enables him to sell more initial appliances which eventually lead to additional sales.

"Every one of the 24 kitchen plans I presented to prospects in 1936, and every one of the 39 I presented last year, sold appliances," said Mr. Prins.

FOLLOWS UP PERMITS

"One of my best sources of prospects is the building permit file at the city hall. I run down people who are going to remodel or build, and talk modern planned kitchens to them. It works."

"And I have another rich source of prospects—the architect. I got a local architect to let me furnish a kitchen plan for him. The result so pleased that I've furnished kitchen plans for several of his homes since. And he lets me know of people who are going to build."

"Still another mighty good source of prospects is our local lumber companies. People thinking of remodeling often get prices from them."

2 Distributors Serve Ex-Real Estate Man Who 'Comes Back' on Appliances

By Alfred Jones

ALBION, Mich.—This is the story of a successful comeback staged by a man well past 40 who, after losing almost all of his savings in a real estate slump, began selling automobiles and later electrical appliances, and who has been so successful that he is now one of the leading independent appliance dealers in this part of Michigan.

In 1927, Dennis Benjamin came to Albion with his life savings of \$12,000 in his pocket. Times were good, prosperity was at its peak, and the future seemed all beer and skittles. So Mr. Benjamin took the \$12,000 and invested it in real estate.

His enterprise seemed a fortunate choice, for the general spree of high-living picked up pace and became dizzier and dizzier.

Then, late in 1929, the merry-go-round broke down and all the joy-riders tumbled to the ground.

BECOMES AUTO DEALER

Mr. Benjamin withstood the first severe shock of the '29 crash, but by 1933 all of his real estate holdings had slipped away.

He had managed to salvage part of his capital, and with this remainder he was able to start anew as an Oldsmobile dealer. His business was profitable enough for him to recoup some of his losses, and he looked around for another field in which to try out his selling ability.

At that time, the only appliance dealers in Albion were the Consumers' Power Co. branch, handling Frigidaire, and a Crosley outlet.

Seeing his opportunity, Mr. Benjamin took some General Electric refrigerators on consignment from the G-E Supply Corp. in Kalamazoo. This was in August, 1935.

"I sold five refrigerators the first day," Mr. Benjamin recounted, "but with little profit."

'FORTUNATE INCIDENT'

For the next few months the refrigerators tagged along as a sideline to the Oldsmobile business. Then, on a December Saturday, there occurred another fortunate incident which marked the beginning of increased income for Mr. Benjamin.

On this particular Saturday afternoon, a man came into Mr. Benjamin's store and asked if he could get a Hotpoint electric range.

He said he had been to the Consumers' Power salesroom, which is across the street from the Benjamin store, but had discovered that Consumers' closed at noon on Saturdays. Wanting a Hotpoint range that very day, the man had come to ask Mr. Benjamin.

The latter said he didn't have one in the store, but would go over to Battle Creek with him to help him buy one. The proposition was accepted, and Mr. Benjamin took the

man to the Central Electric Supply Co. in Battle Creek, Hotpoint distributor.

This company cooperated with Mr. Benjamin in demonstrating the Hotpoint ranges on their display floor, and the man bought his range.

As a result of this sale, Mr. Benjamin and Central Electric Supply Co. reached an agreement whereby the former would be Hotpoint range dealer in Albion.

Consequently, Mr. Benjamin was now in the position of being an independent dealer served by two distributors.

In the spring of 1936, Albion had a builders' show, and Mr. Benjamin took part in it by having a large display booth attractively designed as a fitting background for a group of G-E refrigerators and Hotpoint ranges.

BUILDERS' SHOW EXHIBIT

"My really important appliance business dates from that builders' show," declared Mr. Benjamin. "That display gained me recognition as a dealer, and from then on my sales mounted."

In 1936 he sold about 250 units, and maintained the pace in 1937 by selling an equal number.

"Not one of the appliances I sold in 1937 has been repossessed," said Mr. Benjamin.

The first half of 1938 was quite a bit below the same period of 1937, but even so a profit was entered in the books.

Altogether, Mr. Benjamin has sold about an equal money volume of G-E refrigerators and Hotpoint ranges, and is regarded by both distributors as a good, reliable dealer.

He is one of the few dealers who buy from the G-E Supply branch on an open account, being privileged to order whatever he needs, have it delivered, and being allowed 60 days to pay.

TWO DEALERS

"When I started selling appliances," Mr. Benjamin pointed out, "there were only two appliance dealers in Albion. Today there are more than a dozen dealers."

Most of Mr. Benjamin's sales are made right in Albion, the rural market not being very attractive. The members of the faculty at Albion College have bought quite a number of appliances, and there are still good prospects among them.

Mr. Benjamin employs only one full-time salesman, and together the two are responsible for practically all of the sales.

"We use very little advertising," Mr. Benjamin said. "Our principal source of sales leads is through satisfied customers, and we also land sales by cold canvassing and from floor traffic."

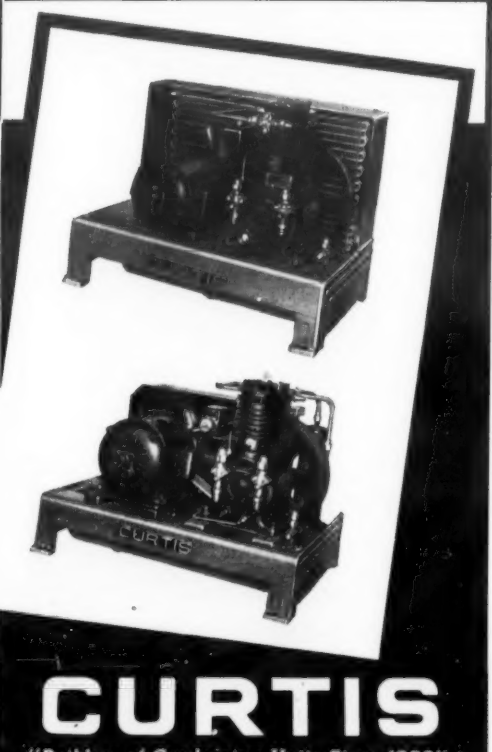
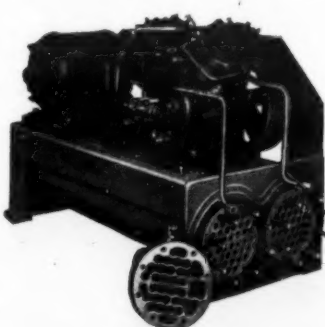
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Retailers To Hold a 'Demonstration Week' Starting Sept. 19 To Show Consumers Place of Stores in Economic Picture

NEW YORK CITY—National Retail Demonstration week will be staged Sept. 19 through 24 by retail stores of all types throughout the country, in an effort to build customer confidence in the future and make consumers more aware of the social and economic importance of retail stores in the nation and community, the National Retail Dry Goods Association has announced.

Efforts are being made to enlist the support of national and local retail associations to secure the cooperation of tens of thousands of individual retailers in the special campaign.

During the drive to put retail stores clearly in the public eye, displays of fall merchandise will be presented, customers will be invited to inspect individual stores' services, and, in numerous other ways, the retail stores of America will be "on parade."

HANDLE OWN PLANS

Merchants will handle their own plans and designs either individually or as neighborhood or community groups, and there will be no particular emphasis on the week's being a national campaign.

Already cooperating with the N.R.D.G.A. are the National Retail Furniture Association and the National Shoe Retailers Association. The International Silk Guild will sponsor its annual "silk parade" during the retail demonstration week, and will coordinate its plans with the theme and purpose of the retail promotion.

OUTLINE STEPS

The N.R.D.G.A. bulletin urged retailers in hundreds of cities to call a meeting of local merchants and take the following steps:

1. Explain the National Retail Demonstration program and plan, and appoint committees and sub-committees to handle promotion, newspaper and radio cooperation, consumer cooperation, contests, and other tasks necessary to the success of the campaign.
2. Invite all independent and chain businesses of all types to join in.
3. Secure the endorsement of the chamber of commerce or merchants' association, or both.
4. Arrange for talks, speeches, and published statements by prominent local men and women.
5. Contact local newspapers for editorial support.

PREPARATIONS URGED

To prepare for the demonstration week, retailers are advised to order a better stock and use more attractive display, base their floor and window settings on the store's main service, enlist the wholehearted cooperation of their employees, plan invitation forms for the public.

It was suggested in the bulletin that in connection with publicity the retailer groups in communities enlist the assistance of newspaper advertising departments in carrying general messages of announcement of

the name and purpose of the local campaign.

Radio "spot" announcements and 15-minute programs featuring talks by well-known community leaders also were suggested as efficient means of publicity, as were slides and "movie shorts" shown by local theaters.

To sound out the advisability of a national demonstration week, a poll was taken among a representative cross-section of the membership of the N.R.D.G.A. Approximately 98% of the retailers answering in the survey said they looked for an improvement in business on a national basis during September, October, and November.

NEW ENGLAND BEST

Sectionally, New England merchants appeared most hopeful of sales improvement, average expected increase being 2% for the three months. In the middle Atlantic states, Middle West, and South retailers generally indicated that sales would not quite attain the level of the three months last year, but would nevertheless show a gradual rise.

Approximately 54% of the retailers polled thought it possible that with a steady rise in business sales at Christmas time might exceed last year's figure.

Trophy Offered For Best Window of the Week

NEW YORK CITY—Trophy in the form of a slim silver goddess will be awarded to the retail store submitting a picture of the best window shown to the public during "National Retail Demonstration" week of Sept. 19.

Sponsoring the display contest is the International Association of Display Men of St. Louis, one of a number of national organizations supporting the "Demonstration." Any store of any type may enter the contest. In addition to the trophy, a number of certificates of award will be given other contestants.

No entry blanks are required, stores being asked simply to forward a picture of their display to Alan A. Wells, manager of the sales promotion division of National Retail Dry Goods Association, New York City.

Since the contest, like the "National Retail Demonstration," is open for participation by any store, contestants need not be department or specialty stores, but may be food stores, drug stores, hardware stores, or any other unit in retail distribution.

Judges for the contest will be Benjamin H. Namm of the Namm Store, Brooklyn; Andrew Connolly, publicity director of Joseph Horne Co., Pittsburgh; and Lew Hahn, general manager of the N.R.D.G.A. Closing date for submission of entries will be Oct. 1.

Retail stores throughout the country also have been sent copies of a booklet, "How Your Store Can Participate in the National Retail Demonstration," published by N.R.D.G.A. and outlining the plan for the promotion, with suggestions on merchandising, advertising, window treatment, interior signs, stimulation of employee and consumer interest, and stunts that have been used successfully in the past.

Personnel Changes Made By Nema

NEW YORK CITY—Several changes in personnel among representatives in various divisions and sections of National Electrical Manufacturers Association recently have been made by member companies of Nema in the refrigeration and household appliance field.

R. C. Cameron, sales manager of household appliances for Kelvinator division of Nash-Kelvinator Corp., replaces Pierre L. Miles as an associate representative, and is to take Mr. Miles' place in the Electric Range Section and the Electric Water Heating Section.

Frank Thornton, Jr., Westinghouse Electric & Mfg. Co., has been named chairman of the general engineering committee recently set up in Nema's Domestic Appliance Section.

F. J. Bommer, Jr., president of Potter Refrigerator Corp., now is executive representative of the company in the Policies Division of Nema, and takes the place of Irving R. Halsey in the Household Refrigeration Section of the Refrigeration Division. T. Irving Potter changes from executive representative to associate representative.

Merlin Wiley no longer represents Nash-Kelvinator Corp. in the Refrigeration Division and the Household Refrigeration Section of the association.

P. Y. Danley, of Westinghouse Electric & Mfg. Co., is no longer associated with the Refrigeration Division and the Household and Commercial Refrigeration sections. R. C. Cosgrove, manager of Westinghouse's household refrigeration department, has been named associate Nema representative, affiliated with the Refrigeration Division and the Household Refrigeration Section. He is the voting representative in the latter.

T. J. Newcomb is to be voting representative of Westinghouse in the Commercial Refrigeration Section.

C. M. Snyder manager in charge of sales for the appliance and merchandising department of General Electric Co., has been named an executive representative in Nema. A member of the business development committee, Mr. Snyder is to be affiliated with the following:

Domestic Appliance Section; Electric Flat Iron, Electric Food Mixer, and Electric Roaster groups; Electric Range Section; Electric Water Heating Section; Fan Motor Section; Refrigeration Division, and Household and Commercial Refrigeration sections.

Dayton's Hot Weather Ups Sales 10% In August For York Supply

DAYTON, Ohio—Hot weather conditions during August are believed to be responsible largely for the 10% increase in electric refrigerator sales of the York Supply Co., distributor of Leonard refrigerators in Dayton and Cincinnati, according to Chelsea York, president and general manager.

"Our refrigerator sales appear to be holding up pretty good," said York, "and while we were about 10% ahead in August over the same month last year, I'm looking for September to be a fair month as compared with a year ago."

York indicated that it is his belief that 1939 will be a big electric refrigerator year and that present signs indicate a general pick-up in business.

Clark Manages New Westinghouse Dept.

EAST PITTSBURGH, Pa.—Creation by Westinghouse Electric & Mfg. Co. of a home planning department and appointment of I. W. Clark, former head of the company's kitchen planning section as its manager has been announced by R. E. Imhoff, merchandising division sales manager.

In his new position, Mr. Clark will continue to direct Westinghouse's kitchen and laundry planning activities, and will also serve as a consultant to architects and building and contracting organizations in matters of scientific home planning. In addition, he will be responsible for the development and direction of the company's home economics activities.

Mr. Clark has been with Westinghouse for the past four years. Prior to this connection he worked with the Hartford (Conn.) Electric Light Co. and with C. P. Chase Co., distributor for G. R. Sellars & Sons, cabinet designer and manufacturer.

This reorganization of the company's home planning services was effected, Mr. Imhoff explained, in anticipation of greatly increased appliance sales as a result of the increasing interest in home modernization and the definite upswing in new home construction.

Elaborating upon this optimistic outlook, Mr. Imhoff pointed to the increasing interest in planned kitchens. In 1935, he pointed out, approximately 50,000 requests were made to national kitchen planning organizations for assistance in solving kitchen problems. In 1936 the number of requests exceeded 250,000, and in 1937 more than 600,000 requests were made.

This factor, coupled with the estimated 4,000,000 new housing units to be constructed in the United States within the next 10 years, indicates a tremendous market for electrical appliances.

Wisconsin Town Virtually Prohibits Canvassing

PORT WASHINGTON, Wis.—A drastic ordinance virtually prohibiting, in its operation, house-to-house solicitation by salesmen of household appliances and other merchandise, was passed by the city council last week.

The measure provides that before a salesman or solicitor may call, regardless of the nature of his business, he must first obtain a permit at the city hall. The householder, in turn, must file a written notice at the city hall that he wishes to be called on by this particular agent, and must specify the particular day on which the call shall be made. No salesman may call, however, until 10 days after such notice has been filed.

It shall be lawful for a salesman to enter private properties not more than once a year for the purpose of obtaining invitations to call.

A salesman making a call not in accordance with the provisions of the ordinance shall be subject to a fine from \$5 to \$25, or imprisonment 15 days in jail.

Servel Net Profits Drop To \$595,252

EVANSVILLE, Ind.—Servel, Inc., reported net profits for the quarter ending July 31 at \$595,252, compared to \$2,158,946 for the corresponding period last year.

For the nine months ending July 31, net profits totaled \$1,231,619, as against \$4,451,375 for the previous year's corresponding period.

Porcelain Institute Program Outlined

CHICAGO—Preliminary program of the third annual Porcelain Enamel Institute forum, to be held at the University of Illinois, Urbana, Ill., Oct. 12 through 14, has been announced by Charles S. Pearce, managing director of the institute.

After the address of welcome by Dean M. L. Enger, of the university's college of engineering, the afternoon session of the first day, Wednesday, will feature talks by Emerson P. Poste, consulting engineer, giving a "Review of the Industry"; Paul L. Smith, bureau of standards, describing "Tests for Impact Resistance"; and Mr. Pearce telling of "The Institute and the Plant Man." Dr. A. I. Andrews, University of Illinois, will preside.

In the evening, Prof. J. O. Kroehenbuehl will present a lighting exhibit and an accompanying address, after which there will be a meeting of the technical research committee.

Thursday's morning general session will be presided over by G. H. Spencer-Strong, of Porcelain Enamel & Mfg. Co., and the following speakers will share the floor: W. N. Harrison, bureau of standards, "Tentative Tests for Abrasion Resistance"; Frank R. Porter, Inland Steel Co., "Factors Affecting Sag Resistance Properties of Enameling Iron." There also will be an address on "Methods for Testing Enamel Stock."

F. E. Hodek, Jr., General Porcelain Enameling & Mfg. Co., will preside at the afternoon general session on Thursday. Scheduled are a talk by a member of the Institute of Vitreous Enamelers; "Discussion of One Cover Coat Ware," by E. C. Aydelotte, Benjamin Electric Mfg. Co.; "Ball Milling Practice," by A. H. Burnham, Jr., Locke Insulator Co., and E. Sechrist, Vitreous Steel Products Co.; "Sources of Enamel Shop Waste," by W. F. Findlay, Findlay's, Ltd.

At the banquet Thursday evening, Bennett Chapple, American Rolling Mill Co., will be guest speaker.

On Friday morning, Oct. 14, there will be held simultaneously a hollow-ware session, a cast iron session, and a sheet iron session.

Jean C. Vollrath, Vollrath Co., will preside at the hollow-ware session, speakers being E. C. Dexheimer, National Enameling & Stamping Co., "Black Specking of Hollow-Ware"; W. V. Jared, United States Stamping Co., "Fabrication and Trimmings"; and a member of the Institute of Vitreous Enamelers.

The cast iron session, with F. B. Mahoney, of Humphries Mfg. Co. presiding, will feature talks by E. B. Rich, American Foundry Equipment Co., "Automatic Blasting"; E. E. Howe, Chicago Vitreous Enamel Products Co., "Some Observations on Dry Process Enameling"; and a member of the Institute of Vitreous Enamelers.

Speakers at the sheet iron session, to be presided over by Dr. J. E. Rosenberg, of O. Hommel Co., Inc., will be G. H. McIntyre, Ferro Enamel Corp., "Color Matching of White Parts"; Ray Harner, Tennessee Stove Works, "Circulating Ground Coat Systems"; and D. W. Talbot, Ohio Steel Foundry Co., "Burning Tools for Enameling."

Concluding the forum will be a general session Friday afternoon, with B. T. Sweely, Chicago Vitreous Enamel Products Co., presiding.

Speakers will be J. F. Roche, Jr., Binks Mfg. Co., "Automatic Spraying and Brushing Equipment"; C. G. Bassler, Taylor-Winfield Corp., "Flash and Roll Seam Welded Assembly for Enameling"; J. J. Canfield and Alva Taylor, American Rolling Mill Co.

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Commercial Refrigeration

Frozen Foods Storage And Retailing Involve Some New Problems

CLEVELAND—When a retail food merchant invests \$700 in a frozen foods display and storage cabinet, he must sell from \$50 to \$74 worth of frozen foods a week to make it profitable, Jack Christian, president of Christian Bros., Inc., Pittsburgh, declared at the recent frozen foods clinic held here as part of the eleventh annual convention of the National Food Distributors' Association.

Mr. Christian also stated that the two primary problems of the frozen foods industry are to show retailers how properly to sell the foods, and to educate the public in the use of frozen foods.

John J. Anton, vice president of Merchants Refrigeration Co., New York City, told the clinic audience that distributors should place refrigerated foods in reputable, established cold storage warehouses, if they do use public warehouses.

"It is as advisable to be as careful about selecting a warehouse as you would be in selecting a bank," said Mr. Anton. "Food once spoiled by improper refrigeration and improper handling entails a loss which cannot be salvaged in any way."

Mr. Anton advised that packages be kept off the floor, preferably being laid on strips of wood, i. e. dunnage, so that the first layer of cases is at least 2 inches above the floor. Piling should progress from the walls inward toward the center of the room, cases being no nearer than 6 inches from the wall.

Each additional layer of cases should be set on dunnage which should extend at least an inch past the end of every package to permit proper circulation of refrigerated air, Mr. Anton continued. Double refrigerator doors are advisable to avoid loss of cold air when taking shipments to and from the cooling room, he added.

Ivan C. Miller, products editor of Food Industries magazine, New York City, stated that the ice cream manufacturer who markets his product through retailers is rapidly losing a portion of his drug store and confectionery trade to counter mixers employed by individual retail units, causing him to seek new fields.

With sales of frozen foods through grocery stores rapidly increasing, and the volume of ice cream sold through retail grocery channels steadily gaining, the ice cream manufacturer realizes that whoever supplies the frozen foods to the retail grocer may also supply that same retailer with packaged ice cream, Mr. Miller said.

Special Cabinets Built For Midway Island

SAN FRANCISCO—Three special refrigerators to be used in transporting fresh meats, vegetables, and fruit from here to the army base on Midway Island have been built by Albright Sheet Metal Works.

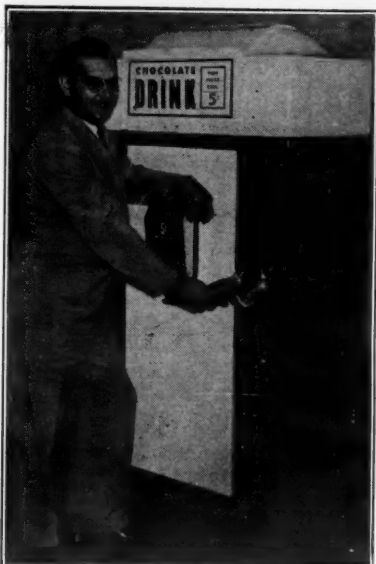
Each box is 10 x 9½ x 8 ft., insulated with 9 inches of kapok, and having a door 3 feet square. There is a capacity for 2,700 lbs. of dry ice to maintain a temperature of 0° F. for 21 days, the time required for crossing to the island.

The boxes were designed by the U. S. War Department, and each cabinet has a heavy strap on either end with a hole for a hook to load the boxes on board ship. Shipments will be sent every month to the 200 men stationed on Midway Island.

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Manager and Product



JAMES R. HUDSON

Hudson Heads Mills' Milk Vender Sales

CHICAGO—James R. Hudson, long associated with the dairy industry and recently connected with Baker Hubbell Dairies, has been named sales manager of the newly created bottled milk vender division of Mills Novelty Co.

The new division was formed to handle production and sales of Mills' new 5-cent vending machine for bottled milk or chocolate drinks. Bottles, although properly refrigerated, are vended dry, and thus dripping is eliminated. Mills compressors furnish the refrigeration.

The machine is claimed to be slug-proof, and has no buttons to push or cranks to turn, the bottles simply sliding out when the nickels are dropped in. The units are finished in brilliant red and white baked enamel.

The venders will be installed by local dairies, which will place the machines, service them, make necessary collections, and assume all responsibility.

The new milk vending units are suggested for use in factories and other business establishments, to make available to employees a mid-morning or mid-afternoon pickup. Carefully checked scientific tests, the company points out, indicate that 15% more efficiency results from between-meal nourishment.

8 Kelvinator Units Serve Oak Park Food Store Cooling Systems

OAK PARK, Ill.—What is said to be one of the largest refrigeration and air-conditioning installations for a single store in this area has been completed here in the remodeled Strickland's Food store at 721 Lake St.

The installation included eight separate Kelvinator refrigerating units, installed by Western Refrigeration Service of River Forest, Ill. These units take care of numerous refrigerated cabinets and counters on the first floor, including a section for whipped cream baked goods. In addition to air conditioning the entire store they also serve the bake shop in the second floor, in which there is a refrigerator to keep dough at the proper temperature, and a special room in which the whipped cream goods are made.

Cooling towers, installed by Binks Mfg. Co., Chicago, are used, and make ready for re-use (with a maximum loss of approximately 10%) all water from the air-conditioning and refrigeration system.

Auburn Auto Plant To Produce Display Cases For 'Winter Air' Firm

CONNERSVILLE, Ind.—Contract to manufacture refrigerated store display cases for Winter Air Products Corp., Chicago, has been obtained by Auburn Automobile Co. here, John K. MacGowan, Auburn's board chairman and general manager, has announced.

Winter Air display cabinets, on the national market for the past three years, are of the self-contained, air-conditioned type, said Mr. MacGowan. Under Auburn manufacture, they will be equipped with Westinghouse hermetically sealed refrigerating units and Westinghouse "Sterilamps," and will be sold by Winter Air through Westinghouse distributors and dealers.

In making the new cases, Auburn will further diversify its manufacturing operations, Mr. MacGowan declared. Since discontinuing automobile building last year, Auburn has concentrated on metal sinks and cabinets, beverage coolers of all types, electric fans, automobile bodies, and metal stampings and assemblies for the automotive and refrigeration fields.

U. S. Authorities Find Pre-Cooling Equipment Ends Potato Soft Rot

WASHINGTON, D. C.—Use of pre-cooling equipment has proved a valuable means of drying potatoes and eliminating the soft rot which formerly was a source of considerable annoyance—and loss—to growers in the Florida area, reports D. F. Fisher, refrigeration specialist of the U. S. Department of Agriculture.

Potatoes harvested in the southern early sections of the United States often come out of the ground covered with mud, and are washed before they are shipped, Mr. Fisher reports. Early potatoes keep none too well, and Florida growers noticed that soft rot developed more rapidly on wet potatoes.

Drying became a serious problem, particularly during humid weather at the peak of the shipping season. Growers found, however, that pre-cooling—a practice in which the produce is cooled rapidly before shipping—dries the potatoes quickly and effectively, eliminating soft rot.

Potatoes were cooled in the refrigerator cars with portable refrigeration units using either independent compressor units or by blowing air through the ice in the bunkers. As the air temperature was lowered, excess moisture taken from the potatoes was condensed on the coldest spot reached by the air—the compressor coils or on the ice—in much the same manner as moisture collects on a window pane on a cold morning.

Pre-cooling is a comparatively inexpensive means of drying potatoes in these areas, Mr. Fisher points out. Growers pre-cool many kinds of fruits and vegetables, and so have pre-cooling equipment readily available for use in the harvest season.

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MOISTURE**

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Fibres will not support capillarity. Sheds free moisture. Dries out unimpaired when soaked. Odor and vermin-proof. PERMANENT . . . NON-SETTLING . . . ECONOMIC. Write for 16-page Insulation Manual and free sample.

THE PACIFIC LUMBER COMPANY
San Francisco Chicago
Los Angeles New York

DURABLE AS THE REDWOODS

'Controlled Air' Storage Boosts Apple Profits

ASHLAND, Mass.—An automatically controlled air-conditioning system in a well-insulated room has enabled George Greene, local apple broker, to store as many as 10,000 bushels of apples throughout the fall and winter and sell them in the spring at from 50 cents to \$1 more a bushel.

The air-conditioning system maintains a uniform temperature of 32 to 34° F. with relative humidity of 85 to 90%, providing an atmosphere in which spoilage is reduced to a minimum, keeping the crop marketable until long after a common storage supply would be depleted.

Mr. Greene is now building additional storage space to accommodate 6,000 extra boxes of apples.

Levering Heads Piqua, O. Co-op Locker Plant

PIQUA, Ohio—Richard Levering has been named president of Pioneer Food Storage Corp., recently formed with the aid of a \$15,000 grant from the Rural Electrification Administration to cover 80% of the cost of constructing a locker plant on the Dixie highway just south of town.



**VIRGINIA SMELTING
COMPANY**
WEST NORFOLK, VIRGINIA

Mills Units, 'Flash' Coil, Used In Dairy and Ice Cream Plant

PITTSFORD, N. Y.—Two Mills condensing units have been installed to cool milk and harden ice cream at the McConnell Dairy here, the cooling system having a capacity of 4,000 quarts of milk a day reduced in temperature from 60 to 38° F.

A 7½-hp. unit cools the sweet water bath which is used in aerating the milk. By building up an ice reserve with a flash coil, the system is capable of handling the heavy load of 4,000 quarts a day.

A 3-hp. unit refrigerates an ice cream hardening room, maintaining a temperature as low as -20° F. The condenser is installed in a pit which can be fitted with a cover in winter so that the unit develops sufficient heat to keep it from freezing.

Condensers were installed by Alhart Electric Co., Rochester, N. Y.

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Some Reactions To Berle's Report

DISCUSSIONS of the preliminary report on monopolies made to the Temporary National Economic Committee by A. A. Berle, which was published in full in last week's issue of AIR CONDITIONING & REFRIGERATION NEWS, have been many and prolonged. General reaction seems to be that this report shows clearly that the author has made a real effort to explore the inner workings of business and find out how it got that way.

A number of paragraphs were especially interesting to us since they deal with conditions which have come under our personal observation as operators of a small business, as citizens of Detroit, and even as critics of the Stuart Chase school of economics.

Automobile Owners Have Paid for Roads

For example, we are inclined to question Mr. Berle's assumption that the expansion of roads and road improvements are a collateral subsidy of State and Federal governments to the automobile industry.

Considering the license taxes and gasoline taxes paid by automobile owners, most of which have been levied for the express purpose of building roads, it seems equally fair to say that the automobile industry has subsidized the country's roads.

Have Contributed Far More Than Received

All in all, automobiles have probably contributed far more to the federal and state governments—especially when one thinks of all the allied industries and suppliers which contribute many forms of taxes to the various governments, and which could not exist were it not for the automotive business—than the governments have expended on road improvement.

In other words, the automotive industry—and its customers—have built the nation's highways, and

contributed fat sums to public treasuries in addition.

Another point made by Berle is that relief to workers in time of layoff is a subsidy to industry. When the automobile plants are closed down, he points out, workers go on relief. Another way of looking at the situation would be to say that when the automobile plants open up, workers are taken off the relief rolls.

Only a Portion of Workers Go on Relief After Layoff

But it is more important to note that Mr. Berle overgeneralizes on this point, probably due to inadequate information. Only a portion of the automotive factory laborers go on relief when plants are closed down. Thousands of them return to farms in the middle west and northwest.

Henry Ford has long promoted the idea of combining farm and factory labor, and gives preference to workers who can so arrange their lives as to combine agricultural and industrial functions. Incidentally, heavy farming seasons dovetail neatly with Detroit manufacturing schedules, especially among farmers in the northwest.

The idea that automobile workers never leave Detroit is decidedly erroneous. When workers are rehired, they are called in from several states by means of postcards. This is true of Nash, General Motors, and Chrysler employees, as well as Ford's.

Provide Simple Work for Men Otherwise Unemployable

Automobile and refrigerator manufacturers have also performed a great social service in providing simple work on mass production lines for men who would otherwise be unemployable; i.e., negroes, cripples, and ex-convicts. Ford and Chrysler have both been active in rehabilitating ex-criminals, and helping them to find a new place in society, with trained social workers hired to assist.

When socially minded persons become indignant over maltreatment of laborers, they commonly refer to coal miners and textile workers. And then they attach indignation aroused over the plight of these groups (these industries are always on the spot because of intense competition—foreign competition on the part of textiles, competition from other forms of energy, such as oil and water-power on the part of coal) to workers in the mass production industries.

Mass Production Labor Best Paid In the World

As a matter of fact, workers in the mass production industries are perhaps the best treated and best paid unskilled laborers in all the world, as both statistics and observations of comparative standards of living will show.

Take also the case of child labor. Contrast the effect on a growing child of working in a textile mill with working on a farm or selling newspapers in a city. It's remarkable to note how many prominent men in all walks of life are proud to relate that they worked on farms or sold newspapers during boyhood.

Detroit, for example, has an Old Newsboys Club, and its roster is a roll call of the city's leading business and professional men. Incidentally, the publisher, adver-

tising manager, assistant advertising manager, business manager, editor, and assistant editor of AIR CONDITIONING & REFRIGERATION NEWS all sold newspapers during their boyhood.

Certainly none of them feel that they were victims of inadequate child-labor laws in their youth. Rather, they are inclined to believe that this early experience gave them a head start in getting jobs and becoming good business men.

Each Industry Must Be Evaluated, Credit Where Due

The point is, and Mr. Berle makes it, that you can't generalize about business or labor. Overall and coverall laws and regulations are manifestly unfair. Writes Mr. Berle:

"My hope is that the investigation of each industry will wind up with an evaluation of the job done by that industry, rather than, as in the case of previous anti-trust investigations, an assumption that any particular form is or is not wicked.

"As I see it, the real question is whether a good job is being done from all points of view."

From the social standpoint, the mass production industries, especially as exemplified by the automotive and refrigeration industries, have many reasons to be proud of their record.

LETTERS

Another Vote For Optimistic News

Earle Rogers Co.
Wheeling, W. Va.

Editor:

The editorial in your Sept. 7 issue was read with a great deal of interest. The writer feels, however, that you have missed the point of Mr. Sampson's argument. I agree with you perfectly that the newspapers should not distort the news. However, I agree with Mr. Sampson that it would be better for all of us if the newspapers would give the more optimistic items the same space and play them up the same way as they do murders, strikes, lay-offs, etc.

In our own newspaper recently, there was a very few lines in an editorial, telling us that the Ford Motor Co. was taking back to work about 24,000 men, and in this same issue the front headlines played up

They'll Do It Every Time . . . By Jimmy Hatlo



a strike situation in a far western city.

Mr. Sampson's thinking, and mine also, is that our local community would have been better off to have read about Mr. Ford taking these men back to work in big headlines, and to print the news as it actually was, but to keep down the size of the headlines on the unfavorable items.

We advertisers spend a great deal of money on the inside pages of newspapers and many times we have our efforts nullified by some headline writer, who is playing up a situation that has little or no bearing on our immediate community, but that because of the size of the headline and the way it is played up, it does have a bad effect on readers.

I have enjoyed reading your paper for some time back, but believe you have missed an opportunity to further a very good idea, advanced by Mr. Sampson. I believe he should be encouraged in his suggestion, rather than criticized. The last part of your article rather belittles his suggestion and I hardly think that such a good one deserves such treatment.

D. EARLE ROGERS,
President

Suggests Dealers Meet At January Show

Thermal Co., Inc.
Wholesale Distributor
Supplies, Controls, Parts
2434 University Ave. (Midway)
Saint Paul, Minnesota

Editor:

We have read page 5 of the Sept. 7 issue of AIR CONDITIONING & REFRIGERATION NEWS and recall that some time during the summer you gave some publicity to the formation of a new national organization of refrigeration dealers and distributors. We feel that there are tremendous possibilities in the organizing of this last, but no means the least, important branch of the industry.

It seems to us that your program should be carried forward with the object in mind of having an initial meeting of this group on a national basis in Chicago in connection with the show. We feel the News has done such splendid service in fostering interest in both the Refrigeration Supplies & Parts Manufacturers Association and the Refrigeration Supply Jobbers Association, that successful organization of the Dealers and Distributors would be assured.

In this way the service men, dealers and distributors, the jobbers, and the manufacturers would have a common ground on which to meet and discuss their problems.

We hope that the News will take the front on this issue as they have on all other issues for the good of this industry.

H. W. SMALL,
President

Confusion Resulting From Headline Brevity

Refrigeration Parts, Inc.
3510 S. Hill St.
Los Angeles, Calif.

Editor:

In your issue of Aug. 31, on page 10, column 2, I note that "Refrigeration Parts Name Now Frank Gillett Co." In this connection the announce-

ment comes at a peculiar time since as of Aug. 1 we moved our office from 1646 Fifth Ave. to our factory at 3510 S. Hill St. and have had several calls inquiring about the change in name and why.

We incorporated April 27, 1936, and I assure you that no change in name or in officers has taken place since and we do not anticipate any change in the near future.

For your information we manufacture and distribute all types of refrigeration equipment and fixtures. We do jobbing of certain items and the writer represents several eastern manufacturers of refrigeration units, coils, etc.

Will appreciate if you will publish some information concerning us to convey the idea to the trade that we are still operating under the same name and growing every day.

RAY STRAHAN,
President

Answer: The story in question refers to the company formerly known as Refrigeration Parts Exchange, as is obvious upon a reading of the article. There is a possibility that persons reading the headline only may have been confused, for which we extend our apologies.

We Get a New Name —'The Ninth Function'

1647 Popham Ave.
New York, N. Y.

Sirs:

Here's my four bucks for one year of AIR CONDITIONING & REFRIGERATION NEWS.

I was formerly connected with a firm that advertised eight functions for year around air conditioning, to wit: ventilation, circulation, filtering, silencing, heating, humidifying, cooling, and dehumidifying. It may interest you to know that we used to refer to your sheet as "The Ninth Function."

MARTIN B. BELINE

And Another One —'A Hold Together'

2272 63rd St.
Brooklyn, N. Y.

Sirs:

Enclosed please find a check payable to you for \$1.00 (to which please give me a credit for my Master Service Manual Vol. 3).

Since you have withdrawn the combined offer on books and the News, I am leaving out the News for some future date. From the one sample copy I see it is sort of "hold together" of the whole industry, and I will not be without it for very long.

ALBERT DUBIEL

Results

3110 W. Pierce St.
Milwaukee, Wis.

Sirs:

Will you please change my address from 127 1/2 E. N. Water St., Neenah, Wis. to the above.

Not having received my last copies as yet due to my moving, I'm getting all behind in the refrigeration world. I would like to add that an advertisement in your classified column certainly brings results.

ARTHUR G. POW

Service News

Stoker To Sell at \$169.50 Introduced By Conco For Mass Market

MENDOTA, Ill. — The Conco "Commander," a new stoker for small homes, which will sell at \$169.50 retail, is being marketed by the Conco-Sampel Stoker Corp. of this city.

While the new low price will place this stoker within reach of the mass market, the dealer's margin will be maintained, and the price will include Conco's "Magic Hand" controls, the company announces.

The Commander will be enameled blue and trimmed with chromium. Hopper is streamlined in design and low, to provide easy filling. Long louvers are placed on each side, and a door in front is removable for inspection or adjustment.

Hopper lid is sponge rubber sealed. Motor is capacitor type, with overload protector to prevent motor burning out in case an obstruction should occur.

The new model has practically all of the features of the regular Conco models, including obstruction clean-out and crusher block, fuel and air adjustments, and features a new vertical segment burner, the company says.

The Commander increases the Conco-Sampel line of stokers to 12 regular models.

6,088 Stokers Sold To Public In June

WASHINGTON, D. C.—Sales of stokers reported to the Bureau of Census, U. S. Department of Commerce for June, 1938 were 6,088 units in all five classes. Class 1, stokers with capacities of 61 lbs. per hour and under, accounted for 5,365 of the total.

While June sales are less than the 8,747 units sold in the same month of last year, the 1938 sales are 20% ahead of the 4,965 stokers marketed by the industry during 1936.

Drives Fuel Co. In New Modern Offices

MADISON, Wis.—J. B. Drives Fuel Co., dealer in Combustioneer stokers for the past 10 years, has completed a new modern office building at 940 Williamson St.

The new building, of concrete block construction with stone facing, furnishes an ample sized display room for demonstrating stoker installations.

Officers of the firm, which was established in 1898 by John B. Drives, Sr., are John B. Drives, president; Roy B. Drives, vice president; Gus J. Drives, secretary; and John J. Drives, treasurer.

FireTender Distributors Hold Convention

INDIANAPOLIS—A one-day convention for distributors of FireTender automatic stokers, including a factory inspection trip and an open forum for product discussion, will be held here Aug. 12 by Holcomb & Hoke Mfg. Co., according to G. S. Peters, sales manager.

The convention will be concluded with a banquet at which Frank Hoke, vice president and general manager, will preside as toastmaster.

Simplex Co. Formed as Stoker Products Sells Out

DECATUR, Ill.—Stoker Products, Inc., manufacturer of stokers since 1932, has been taken over by W. H. Klett, 239 W. Prairie Ave., Decatur, and the name of the firm changed to Simplex Stoker Co.

Morehouse & Wells Co., hardware dealer, has been appointed Macon county dealer for the new company.

New Carrier Stoker Has 'Start and Stop' Feed

SYRACUSE, N. Y.—A "start and stop" coal feed is a feature of a new automatic stoker developed recently by Carrier Corp. for domestic use with either anthracite or bituminous coal.

The "start and stop" sequence of the coal feed produces a slightly jerky action, to aid distribution of air throughout the firebed by preventing the formation of crusts or trees.

As coal is forced upward through the firebed, it is gradually heated by incandescent coals above, thus releasing all abundant gases which then mix with the air. This results in full benefit of all the coal's gas content plus the added heat value of coke, into which the coal is transformed as it ascends, the company claims.

Equipment of the stoker includes five-speed transmission, totally enclosed standard make motor, shear pin for safe-guarding delicate parts from strain of any foreign particles in fuel, oversize fan, removable air ports, and a clean-out door. The stoker is finished in taupe gloss, with chrome hardware.

An ash remover of automatic design is supplied with the stoker for use with anthracite coal.

Increased Advertising To Be Split 50-50 By Iron Fireman Co.

CLEVELAND—Fall and winter promotion plans of Iron Fireman Mfg. Co. call for greatly increased use of newspaper advertising, with the company retaining control of the advertising while financing it on a 50-50 basis with dealers, it was revealed here recently.

Already 191 dealers have signed up for participation in this cooperative campaign, compared to only 43 dealers last year, C. T. Burg, general sales manager, pointed out.

Newspaper schedules will be released in time to cash in on magazine advertising, and newspaper copy will tie in with that used in the periodical publications. Magazines to carry the Iron Fireman story are American Home, Better Homes & Gardens, Business Week, and Saturday Evening Post. Power will be the only industrial paper used. The fall campaign opened with a four-color full-page spread in the Sept. 10 issue of Saturday Evening Post.

Dale Wylie, sales promotion manager, told dealers that showmanship must be employed if they are to cash in on opportunities created by advertising, and urged dealers to extend their merchandising efforts to the rural market. He also listed the company's dealer aids for the coming season. These include a direct mail series aimed at all types of coal users, posters, eight 15-minute radio recordings of famous bands, and blow-ups of newspaper advertising.

Although unit sales are 4% ahead of 1937, dollar volume is somewhat off, due to a decline in sales of large units, and the promotional campaign for the coming season is aimed to overcome this deficiency.

E. C. Sammons, executive vice president of the company, informed dealers that Iron Fireman had spent \$2,000,000 in national advertising during the past decade, exclusive of programs financed in large part by dealers. During that same period, he stated, the public paid \$75,000,000 for the company's products and services. The company's promotional investment this year will be between eight and 10 million dollars, he said.

Regional sales gatherings such as the one held here are an innovation in the Iron Fireman dealer contact setup. Previously, several groups of factory representatives have been sent out to cover the various territories. This year, however, only one group, composed of the firm's chief executives, is making the swing.

This crew will conduct meetings at 13 strategic points, to which dealers will be summoned.

Direct Mail Advertising Group Will Emphasize Correlation of Efforts With Specialty Salesmen

CHICAGO—Concerted effort to establish scientific principles for the use of direct mail advertising is to be made by the Direct Mail Advertising Association during its twenty-first annual convention in the Stevens hotel here Sept. 28 through 30.

First session of the convention will be devoted to a demonstration of advertising technique successfully used in teaching salesmen the correlation between advertising and sales activities.

To add emphasis to the demonstra-

tion, case histories of a number of businesses will be related, and what the correct diagnosis revealed and developed will be discussed; a complex business organization with ramifying distributing outlets will be diagnosed; and a one-man advertising department will be minutely studied.

Presentation of specific formulas for certain businesses by five recognized specialists will feature the second session of the convention, and the third session will be a study of the application of the principles.

evolved during the first two meetings.

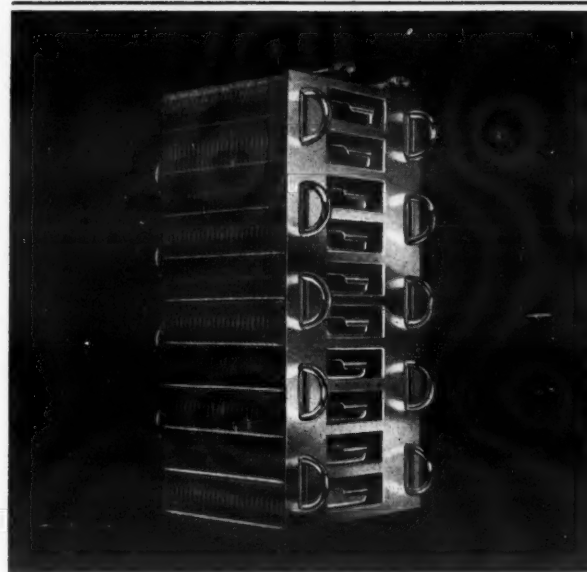
This idea of diagnosis, formula, and application is a new theory of convention developed by Lloyd Herrold, of the department of marketing at Northwestern university.

Mr. Herrold is program chairman for the convention, and he will preside at the three sessions.

In addition to the main sessions, there will be informal group discussions at which industrial, retail, financial, social service, insurance, and direct selling advertising will be the topics of conversation.

An exhibit of foreign advertising as practiced by leading members of the profession abroad will be presented on the final day of the convention.

THE BUYER'S GUIDE



Give Your Customers SOMETHING EXTRA and They'll Always Be Your Customers

For instance—the next time you bid on coils for a reach-in box installation, suggest the Peerless Finned Ice Cube Maker. Any customer will appreciate the extra value and extra service they will receive from these compact combination units. They provide both refrigeration and ice cubes and are available in over 150 sizes.

The Peerless Finned Ice Cube Maker is a BETTER VALUE for anyone's money—and it puts more money in your pocket.

PEERLESS of AMERICA, Inc.

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Main Factory—General Offices 515 West 35th Street Chicago
Pacific Coast Factory 3000 S. Main Street Los Angeles
EXPORT DIVISION: P. O. Box 636, Detroit, Mich., U. S. A.
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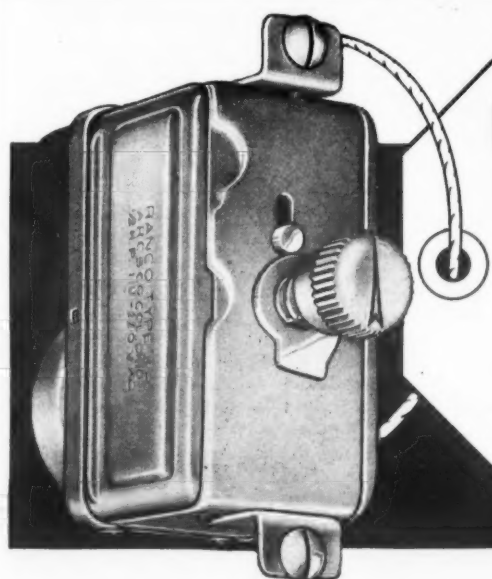
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EVERYTHING YOU NEED FOR Profitable Volume

Get additional profitable volume without extra overhead by selling PELCO beverage and beverage-food coolers! PELCO is "package-type"—simply plug it into any light socket. Your present salesmen can sell it to taverns, hotels, bowling alleys, restaurants, dairies—or any place that sells bottled beverages. There's a complete line, smartly finished in modern Pelco red baked enamel with stainless steel trim and chrome-plated hardware. Super-powered PELCO gives unequalled performance—precision manufacture for trouble-free long life—and full factory protection and help, backed by national advertising.

Address Desk A-98.

Refrigeration Division
PORTABLE ELEVATOR MFG. CO., Bloomington, Illinois
In Canada UNIVERSAL COOLER CO. & CANADA LTD. BRANTFORD, ONT.



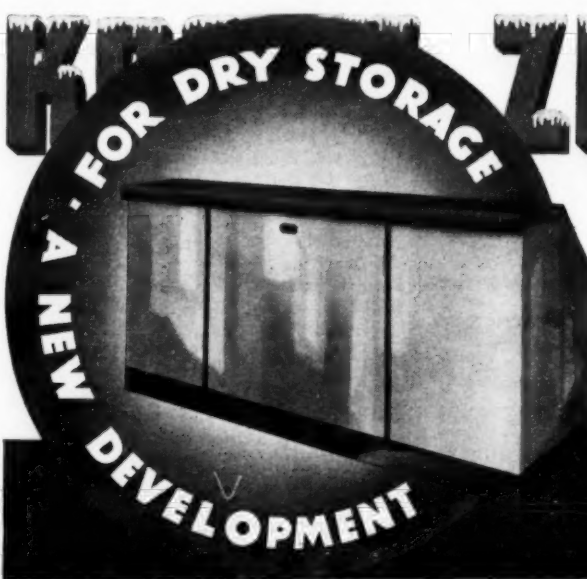
EXACT Replacement PRECISION CONTROLS

RANCO is world headquarters for Household Refrigerator Thermostats. One big reason is that Ranco has more Exact Replacements than any other line—and EVERY Ranco built is a model of accuracy, simplicity and dependability!

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For Complete Export Information Write

Ranco
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FOR DRY STORAGE
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ZEROSTREAM Sensational BOTTLE BEVERAGE COOLER

An exclusive Koch development offering unusual sales opportunity to live dealers

WRITE • WIRE • PHONE

KOCH REFRIGERATORS
NORTH KANSAS CITY, MO.

Air Conditioning

How Air-Conditioning Concerns Spent Their Advertising Money This Year

(Concluded from Page 1, Column 4)
first half of 1938 have been grouped into two classifications, first of which covers residential air conditioning and the other covering industrial air conditioning and refrigeration.

Six manufacturers spent \$64,595 for residential air-conditioning advertising in magazines. Industrial air-conditioning advertising totaled \$251,508, with 16 manufacturers listed. Included in this last classification was one refrigerant manu-

facturer and a Carrier distributor. Airtemp led residential conditioning advertisers, according to the analysis, with expenditure of \$39,990. Delco-Frigidaire was next, with \$11,995, and American Blower Corp. was third, with \$5,900 reported.

York and Carrier led in the industrial advertising lists, the former company having a total, according to the survey, of \$69,707, which included some advertising of Yorkaire portable units. Carrier's total, which also included money spent on

its portable conditioner, was \$40,325. Delco-Frigidaire's industrial conditioning advertising total was reported at \$29,725, which added to \$31,260 spent for Frigidaire commercial refrigeration, brings that organization's industrial total to \$60,985. Airtemp's spending in this field amounted to \$18,925, General Electric Co.'s to \$12,138, Kinetic Chemicals' to \$10,500, Westinghouse's to \$7,000, and Frick Co.'s to \$6,975. Sturtevant spent \$3,700, according to the survey, Buffalo Forge, a total of \$6,405, and Ilg Electric Ventilating Co., \$10,728 in advertising its kitchen and industrial ventilating systems. Kelvinator is listed as spending \$1,400. The Carrier distributor is Quinn Engineering Co., listed as spending \$600 for three columns of advertising in the May New Yorker magazine.

Residential Air Conditioning

Airtemp

AIRTEMP, INC.
(Airtemp Air Conditioning—Home and Industrial)

Life (third cover)	April
Expenditure for month	.....\$ 7,998
Life (third cover) two	May
Expenditure for month	..... 15,996
Life (third cover) two	June
Expenditure for month	..... 15,996
Total	.....\$39,990

American Blower

AMERICAN BLOWER CORP.
(American Blower Portable Home Conditioners)

Life (1/2 page)	May
Expenditure for month	.....\$2,950
Life (1/2 page)	June
Expenditure for month	..... 2,950
Total	.....\$5,900

Buffalo Forge

BUFFALO FORGE CO.
(Buffalo Attic Fans)

Time (1 column)	May
Expenditure for month	.....\$885
Total	.....\$885

Delco-Frigidaire

DELCO-FRIGIDAIRE
CONDITIONING CORP.
(Delco-Conditionaire—Home)

Better Homes & Gardens (1 column)	April
American Home (1/2 page)	
House Beautiful (1/2 page)	
House & Garden (1/2 page)	
Expenditure for month	.....\$ 5,110
Better Homes & Gardens (1 column)	May
American Home (1/2 page)	
House Beautiful (1/2 page)	
Expenditure for month	..... 4,410
Time (1 page)	May
Expenditure for month	..... 2,475
Total	.....\$11,995

Guth

EDWIN F. GUTH CO.
(Guthfan Conditionaire)

American Home (1/2 page)	May
Expenditure for month	.....\$1,050
Better Homes & Gardens (1 column)	June
Nation's Business (1 column)	
Life (1/2 page)	
Expenditure for month	..... 3,605
Total	.....\$4,655

Commercial Air Conditioning

Airtemp

AIRTEMP, INC.
(Air Conditioning—Industrial)

Business Week (2 pages)	February
Time (2 pages)	
Expenditure for month	.....\$ 6,580
Business Week (2 pages)	March
Time (2 pages)	
Expenditure for month	..... 6,580
Business Week (1 page)	April
Time (2 pages)	
Expenditure for month	..... 5,765
Total	.....\$18,925

Auditorium Corp.

AUDITORIUM CONDITIONING CORP.
(Air Conditioning)

Forbes (1 column)	January
Expenditure for month	.....\$ 250
Forbes (1 column)	March
Expenditure for month	..... 250

Forbes (1 column)	April
Expenditure for month	..... 250
Forbes (1 column)	May
Expenditure for month	..... 250
Total	.....\$1,000

Buffalo Forge

BUFFALO FORGE CO.
(Buffalo Ventilating Fans)

Business Week (2 cols., 72 lines)	January
Expenditure for month	.....\$ 720
Business Week (3 columns)	February
Expenditure for month	..... 860
Business Week (2 cols., 72 lines)	March
Expenditure for month	..... 720
Business Week (3 columns)	April
Time (1 column)	
Expenditure for month	..... 1,745
Business Week (2 columns)	May
Time (142 lines)	
Expenditure for month	..... 1,475
Total	.....\$5,520

Carrier

CARRIER CORP.
(Air Conditioning—Industrial)

Business Week (1 page)	January
Expenditure for month	.....\$ 815
Fortune (1 page)	February
Time (1 page)	
Business Week (1 page)	
Expenditure for month	..... 4,690
Fortune (1 page)	March
Time (2 pages)	
Business Week (2 pages)	
Expenditure for month	..... 7,980
Time (2 pages)	April
Expenditure for month	..... 4,950
Fortune (1 page)	May
Time (2 pages)	
Business Week (1 page)	
Expenditure for month	..... 7,165
Forbes (1 page)	April
Business Week (2 pages)	
Expenditure for month	..... 2,380
Business Week (1 page)	May
Time (1 page)	
Expenditure for month	..... 3,290
Business Week (2 pages)	June
Time (3 pages)	
Expenditure for month	..... 9,055
Total	.....\$40,325

Clarage Fan

CLARAGE FAN CO.
(Air Conditioning—Industrial)

Business Week (1 page)	February
Expenditure for month	.....\$ 815
Business Week (1 page)	March
Expenditure for month	..... 815
Business Week (1 page)	April
Expenditure for month	..... 815
Business Week (1 page)	May
Expenditure for month	..... 815
Business Week (1 page)	June
Expenditure for month	..... 815
Total	.....\$4,075

Delco-Frigidaire

DELCO-FRIGIDAIRE
CONDITIONING CORP.
(Air Conditioning—Industrial)

Time (1 page)	March
Saturday Evening Post (2-color page)	
Expenditure for month	.....\$11,975
Saturday Evening Post (2-color page)	May
Expenditure for month	..... 9,500
Saturday Evening Post (1/2 page, 2 color)	June
Expenditure for month	..... 4,750
Time (2 columns)	May
Expenditure for month	..... 1,750
Time (2 columns)	June
Expenditure for month	..... 1,750
Total	.....\$29,725

Frick

FRICK CO.
(Industrial Refrigeration)

Nation's Business (1 column)	January
Time (142 lines)	
Business Week (72 lines)	
Expenditure for month	.....\$1,490
Time (71 lines)	February
Business Week (72 lines)	
Expenditure for month	..... 610
Time (71 lines)	March
Business Week (144 lines)	
Expenditure for month	..... 765
Nation's Business (1 column)	April
Time (1 column)	
Business Week (72 lines)	
Expenditure for month	..... 1,535
Time (1 column)	May
Business Week (72 lines)	
Expenditure for month	..... 1,040

Nation's Business (1 column)	June
Time (1 column)	
Business Week (72 lines)	
Expenditure for month	..... 1,535
Total	.....\$6,975

General Electric

GENERAL ELECTRIC CO.
(G-E Unit Air Conditioner)

Time (2-color center spread)	May
Time (1 page)	
Expenditure for month	.....\$ 9,663
Time (1 page)	June
Expenditure for month	..... 2,475
Total	.....\$12,138

Ilg

ILG ELECTRIC VENTILATING CO.
(Ventilation and Air Conditioning)

Time (2 color page)	January
Expenditure for month	.....\$3,594
Time (1 column)	February
Expenditure for month	..... 885
Time (2 color page)	March
Expenditure for month	..... 3,594
Time (1 column)	May
Expenditure for month	..... 885
Total	.....\$8,958

Kinetic Chemicals

KINETIC CHEMICALS, INC.
(“Freon” Refrigerants)

Time (6 columns)	March
Expenditure for month	.....\$ 5,250
Time (2 columns)	April
Expenditure for month	..... 1,750
Time (4 columns)	May
Expenditure for month	..... 3,500
Total	.....\$10,500

Quinn

QUINN ENGINEERING CO., INC.
(Carrier Portable Conditioner)

New Yorker (3 columns)	May
Expenditure for month	.....\$600
Total	.....\$600

Sturtevant

B. F. STURTEVANT CO.
(Air Conditioning—Industrial)

Business Week (2 columns)	January
Expenditure for month	.....\$ 565
Business Week (2 columns)	March
News-Week (1 column)	
Expenditure for month	..... 940
Business Week (4 columns)	April
Forbes (1 column)	
Expenditure for month	..... 1,380
Business Week (2 columns)	June
Forbes (1 column)	
Expenditure for month	..... 815
Total	.....\$3,700

Westinghouse

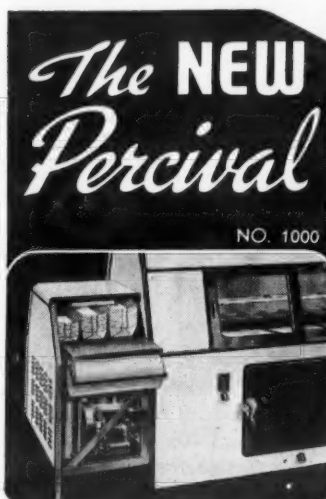
WESTINGHOUSE ELECTRIC & MFG. CO.
(Air Conditioning—Industrial)

Time (2 columns)	February
Expenditure for month	.....\$1,750
Time (4 columns)	March
Expenditure for month	..... 3,500
Time (2 columns)	April
Expenditure for month	..... 1,750
Total	.....\$7,000

York

YORK ICE MACHINERY CORP.
(Air Conditioning and Refrigeration)

Fortune (1 page)	January
Time (1 page)	
Saturday Evening Post (1 page)	
Expenditure for month	.....\$11,875
Saturday Evening Post (1 page)	February
Business Week (1 page)	
Expenditure for month	..... 8,897
Fortune (1 page)	March
Time (1 page)	
Business Week (1 page)	
Expenditure for month	..... 4,690
Fortune (1 page)	April
Time (1 page)	
Business Week (1 page)	
Saturday Evening Post (2-color page)	
Expenditure for month	..... 14,190
Time (1 page)	May
Saturday Evening Post (2-color page)	
Expenditure for month	..... 12,790
Saturday Evening Post (2-color page)	June
Business Week (1 page)	
Expenditure for month	..... 10,315
New Yorker (2 columns)	April
Expenditure for month	..... 200
New Yorker (2 columns)	May
Expenditure for month	..... 400
Fortune (1 page)	June
Time (2 pages)	
Expenditure for month	..... 6,250
Total	.....\$69,707



DISTRIBUTORS WANTED

Write for descriptive literature of entire Percival line. Meets every requirement of the modern food store. Ask for details of profit making franchise and new Percival finance plan.



FACTORY INSTALLED... FACTORY TESTED

READY TO OPERATE ON ARRIVAL

Note these superior features... balanced refrigeration... temperature control... controlled high humidity... genuine porcelain finish... corkboard insulation... abundant storage space... magnetic display... no-sweat front glass... three-way service cabinet with scale stand, wrapping counter and paper roller, and unit housing.

The Percival Unitized Case is built to the high standard of all Percival equipment. Due to its popularity and volume production, it is offered at an extremely attractive price. 52 Years of Service 1886-1938

C. L. PERCIVAL COMPANY DES MOINES IOWA

SHERER RETARDO

OFFERS
NEW SALES
OUTLET FOR
COMPRESSORS

Sherer's RETARDO offers successful 72 hour retardation... increases bakery profits—will increase YOUR equipment and compressor sales. Now is the time to cash in on this new field. Sell a RETARDO AND a compressor.

In addition to RETARDO, Sherer offers a complete line of other refrigerator display and storage equipment. Ask for franchise details, mentioning territory covered.

SHERER-GILLETT COMPANY
Marshall, Michigan

Demand the Superior Advantages Offered by



Higher-Efficiency, Lower-Operating-Cost Equipment

Coils - Humi-Temps
Icy Rapids - Water Coolers

Write Today for New Descriptive Literature—Built Only by

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General Offices and Factory:
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Branch Factory: New York City, N. Y.

Originators of the Cross-Fin Coil

Industrial Relations

Personnel and Plant Problems In Spotlight At Management Congress Starting Sept. 19

WASHINGTON, D. C.—Program of the Seventh International Management Congress, to be held here Sept. 19 through Sept. 23, has been announced by William L. Blatt of Philadelphia, chairman of the coordinating committee.

The five-day series of general and technical sessions will feature addresses and papers by more than 200 experts in the fields of administration, production, distribution, personnel, agriculture, and the home.

Prominent among the scheduled speakers are Cordell Hull, Secretary of State; Daniel C. Roper, Secretary of Commerce; William Allen White, editor of The Emporia Gazette; Lewis H. Brown, president of the Johns-Manville Corp.; W. J. Cameron, Ford Motor Co.; Karl T. Compton, president of Massachusetts Institute of Technology; and John G. Winant, director of the International Labor Office.

The approaching congress is the first to be held in the United States, and more than 2,000 Americans and between 300 and 500 representatives from foreign countries are expected to attend the triennial event.

MANY TOPICS COVERED

Official themes of the meeting which will be developed by speakers and contributors of papers are "Recent Developments in Management," and "Economic and Social Aspects of Management."

Present schedule of speakers and contributors of technical papers includes: Edward T. Gushue, vice president of Detroit Edison Co., "Purchasing and Profits"; D. Levinger, engineer of manufacture for Western Electric Co., "Modern Quality Control Technique"; K. O.

Schulte, assistant to manager of Schenectady works of General Electric Co., "Grading of Labor Occupations."

M. W. Smith, Westinghouse Electric & Mfg. Co., "The Importance of Research and Development"; Morris S. Viteles, Philadelphia Electric Co., "The Application of Psychology in American Industry"; Dr. E. A. White, director of the committee on the relation of electricity to agriculture, "Power Resources on the Farms of the United States."

ON PERSONNEL PROBLEMS

J. W. Dietz, superintendent of industrial relations for Western Electric Co., "Organizing the Personnel Function of Management"; and Arthur W. Page, vice president of American Telephone & Telegraph Co., "Fundamentals of a Public Relations Program for Business."

A. W. Robertson, chairman, Westinghouse Electric & Mfg. Co., will speak on "Management's Responsibilities to Society" at the general session of the congress on Monday, Sept. 19.

SESSION CHAIRMEN

Presiding at the various sessions will be C. S. Ching, director of industrial and public relations for U. S. Rubber Products, Inc.; Clarence Francis, president of General Foods Corp.; Dr. Harvey N. Davis, president of Stevens Institute of Technology; W. Averell Harriman of Brown Bros., Harriman & Co.; and Charles R. Hook, president of American Rolling Mill Co.

Others acting as session chairmen or rapporteurs are: William F. Hosford, vice president of Western Electric Co., vice chairman of the production section of the technical sessions; Chester I. Barnard, president, Bell Telephone Co. of New Jersey; W. G. Marshall, vice president, Westinghouse Electric & Mfg. Co.; Mr. Dietz; Dr. White; and Dr. T. Lyle Hazlett, medical director, Westinghouse Electric & Mfg. Co.

GET INDUSTRY SUPPORT

Host organizations in the electrical industry are: Consolidated Gas, Electric Light & Power Co., Baltimore; Thomas A. Edison Industries, Inc., Bloomfield, N. J.; General Electric Co., Schenectady, N. Y.; Westinghouse Electric & Mfg. Co., Pittsburgh; and The Square D Co., Detroit.

The congress is being financially supported by a number of corporations, associations, and individuals, including: American Telephone & Telegraph Co., Atlas Corp., Crouse-Hinds Co., Duncan Electric Mfg. Co., Thomas A. Edison Industries, Electric Storage Battery Co., Edison Electric Institute, General Electric Co., Graybar Electric Co., Mica Insulator Co., Northern Equipment Co., Norton Co., Ohio Brass Co., Okonite Co., Square D Co., Pass & Seymour, Superheater Co., Western Electric Co., and Westinghouse Electric & Mfg. Co.

25,000 Visit Open House At Bridgeport Plant

BRIDGEPORT, Conn.—More than 25,000 persons visited the General Electric Co. factory here during a recent, employee-managed "open house."

Roderick S. McNeil, G-E worker for more than 50 years, was general chairman in charge of the open house, and was assisted by a committee of 500 factory and office employees.

To demonstrate working conditions to the visitors, the entire plant was operated by a force of regular employees. The G-E Quarter Century Club, comprised of 77 employees with an aggregate service to the company of 4,272 years, guided visitors through the factory.

The open house was conducted as a new gesture in employee and public relations.

Vitamin 'A' Tablets Aid To Westinghouse Workers Who Do Color Matching

MANSFIELD, Ohio—A little carotene tablet, chock full of vitamin A, is playing an important part in the manufacture of Westinghouse electric refrigerators and ranges.

Each one of these tablets, whose full name reads carotene-in-oil, contains as much vitamin A as four pecks of spinach—that's why they're part of the daily diet of employees engaged in color-matching work at the Westinghouse Mansfield plant.

Just what vitamin A, carotene tablets, and spinach have to do with a Westinghouse color matcher is quite a story—one that goes back 15 years.

Decade and a half ago, the Mansfield plant began building up its color-matching facilities, in order to improve efficiency and quality, and at the same time to lower somewhat the costs of color matching white finishes for refrigerators and ranges.

MANY SHADES OF WHITE

Such matching is necessary because so many factors in the manufacture of porcelain enter the whiteness of the product that there is some unavoidable variation in color.

Crude methods of the early days soon were abandoned in favor of the many improvements resulting from a constant study of the problem. Men assigned to color matching were selected with great care, shifts were shortened and changed frequently, and such mechanical improvements as photo-electric matching and mercury vapor and shadowless lighting—all these marked great advances in the campaign.

Finally, Westinghouse developed a "tunnel of light," in which color matching is carried on under artificial daylight, indistinguishable from the real thing. Amount of light in the tunnel is estimated as 50 times that of so-called well-lighted school-rooms, 25 times that used in stores and offices, and 10 times that usually employed in industrial inspection work.

But the very high intensity of the light, it was found, had a tendency to destroy what the medical profession terms "visual purple," the lack of which is definitely associated with eye fatigue. And in inspections where it is necessary to distinguish between as many degrees of white as there are shades of blue, eyes must be sharp.

WHAT VISUAL PURPLE IS

Visual purple is a substance in the retina of the eye that is closely connected with the process of seeing. When light falls on the retina, which corresponds to the sensitive plate or film in a camera, the visual purple is changed to another substance. This change seems to be responsible for the eye's sensitivity. In order to maintain a supply of visual purple, the body must continually produce or regenerate it—and that's where vitamin A comes in.

Basing their experiment upon these already familiar facts, Dr. Ralph C. Wise, Mansfield eye specialist, in cooperation with Dr. O. H. Schletter of the Westinghouse medical department, set out to conduct a series of tests and to make the first large-scale practical application of this theory ever made in an industrial plant.

Most significant element in the success of these experiments was a new machine known as the bio-photometer, which very accurately measures the rate and regeneration of visual purple, by obtaining so-called "light thresholds" under normal condition.

TESTS SHOWED NEED

When the preliminary tests made by bio-photometer showed conclusive of eye fatigue in color matchers, the research proceeded on the assumption that vitamin A deficiency was clearly indicated, and the doctors began giving the carotene tablets.

After chartings had been taken and frequently re-examinations by a bio-photometer had been made, a standard dosage of three tablets daily was adopted, and as now given to employees working in the "tunnel of light."

After seven months, the treatment had improved the reproduction of visual purple more than 75%. Eye-fatigue, headaches, eye strain, a weakened vision were virtually elimi-

nated among the color matchers. Most of them showed an appreciable improvement in health, many gained weight, and several who reported they had previously dreaded night driving soon found it not at all taxing.

Meanwhile, the average of pieces rejected because they were off color has steadily declined, being now less than one third of the average considered creditable before Dr. Wise and Dr. Schletter began their experiments.

All color-matching inspectors now have a semi-monthly check-up on the bio-photometer, and the dosage of vitamin A is increased if a deficiency is apparent. Also, any new inspector who works on color matching is checked on the device before he is allowed to work. If he is deficient, vitamin A treatment begins at once.

Maybe Popeye, the comic-strip sailorman, ought to reach for a carotene capsule instead of a case of spinach.

New Eye Protector Shield Marketed By Jackson

DETROIT—A new eye protection device, listed as the Jackson "Type C" EYESHIELD, has been introduced by Jackson Electrode Holder Co. here for use in connection with soldering, welding, chipping, and other types of work in which workmen's eyes are endangered.

The new eyeshield consists of a flexible, transparent, non-inflammable visor in a selection of clear, smoked, light green, dark green, or amber shades. Visor is adjustably hinged to a light headgear, no part of which rests on nose or ears, it is claimed. Ventilation eliminates fogging, protection is afforded on front and sides, and the head band is equipped with removable sweat band.

Philco Plant To Reopen; 4-Month Strike Ended

PHILADELPHIA—Striking employees of Philadelphia Storage Battery Co., manufacturer of Philco products, last week signed an agreement ending a four-month labor dispute which for a time threatened to cause removal of the company's plant from this city.

The agreement was signed by officials of the United Electrical, Radio & Machine Workers of America, a CIO union, and James M. Skinner, president of Philadelphia Storage Battery Co., after some 8,000 Philco workers had voted at a secret ballot previously to accept a contract that would reopen the radio factory.

All previous efforts to settle the labor dispute had met with failure, including the work of several mediators who had attempted to get factory and union officials to see eye to eye. Several votes of the acceptance of compromise agreements were taken during recent weeks, but each time union representatives were asked to return with new proposals.

Officials of the company had threatened to move their plant from the city if an agreement were not reached soon, and it is said that refusal by the union to accept the adjustments finally agreed upon would have resulted in the immediate dismantling of the local plant.

RCA Mfg. Co. Renews Pact With CIO Union

CAMDEN, N. J.—Renewal of the contract between RCA Mfg. Co. and Local 103 of the United Electrical, Radio & Machine Workers of America has been agreed upon.

The new contract will extend until Oct. 7, 1939, and provides for continuation of existing wage scales, company recognition of the union as sole bargaining agent, and agreement by the union not to request a closed shop.

FOR SEAL REPLACEMENTS

USE CHICAGO SEALS
CHICAGO SEAL CO.
9 S. CLINTON ST. - CHICAGO, ILL.

PAR CONDENSING UNITS
28 MODELS
1-4 TO 20 H. P.
WRITE FOR FREE CATALOG
MODERN EQUIPMENT CORP.
DEFIANCE, OHIO, U. S. A.

Dayton V-BELTS

Silent, vibrationless, dependable, long-lasting. Powerful grip prevents slippage. A nearby distributor carries a complete stock for appliances and machines.

THE DAYTON RUBBER MFG. CO., DAYTON, OHIO
World's Largest Manufacturer of V-Belts

Anaconda Copper Refrigeration Tubes

Easily bent!

THE AMERICAN BRASS CO.
FRENCH SMALL TUBE BRANCH
General Offices Waterbury, Conn.

"FOGEL BUSINESS REPEATS ITSELF"

Our dealers have found this to be true, because completely satisfied owners recommend Fogel equipment to their fellow merchants and insist upon Fogel for their own store-changes.

Inquire today about our complete line of refrigerated food storage and display equipment.

Interesting distributor proposition to qualified firms.

FOGEL REFRIGERATOR COMPANY Since 1899
16th & Vine Sts., Phila., Pa.

To Insure PROTECTION from high head pressures, frequency of cycling; blown fuses, or burned-out motors . . . USE

AMINCO
Automatic Suction Pressure Throttling Valve

To avoid starting overloads on compressor motors, permitting motor and compressor to attain top speed on light loads, an automatic throttling valve is definitely required.

It acts similarly to a governor; eliminating an overloaded motor condition due to high back pressures beyond the capacity of the motor to handle continuously without danger.

Simple in action, it protects against the very high back pressures built up in the evaporator, suction line, and compressor crankcase.

Full details on application.

AMERICAN INJECTOR COMPANY
1481 Fourteenth Avenue
DETROIT, MICHIGAN
Pacific Coast Stocks carried by Van D. Clothier, 1015 E. 16th, Los Angeles, Cal.

A tight system calls for FITTINGS THAT WILL STAY TIGHT

Imperial S. A. E. flared fittings have been setting a mighty fast pace in the air conditioning and refrigeration field . . . and their rapid acceptance by installation and service men is based on results. Imperial fittings are tight when the job is finished and they stay tight.

Write for catalog covering complete listing of sizes and prices.

IMPERIAL BRASS MFG. CO., 565 S. Racine Ave., Chicago

IMPERIAL Fittings ORDER FROM YOUR JOBBER

VALVES • TOOLS • CHARGING LINES • FLOATS • DEHYDRATORS • STRAINERS

QUESTIONS

Comprehensive Questions On Replacement Market

No. 3283 (Financial Concern, Illinois)—"In several of your editorials I have noticed comments to the effect that in recent years retirements of refrigerators are low because of the large proportion of trade-ins that are resold as second-hand refrigerators. As I am trying to make an estimate of the trends in sales of refrigerators, information on this subject is of vital importance.

"Specific questions to which I am seeking an answer are:

"1. What is the real life of a domestic refrigerator. It seems to me fairly obvious that the life of refrigerators manufactured in the past few years will be considerably greater than the life of those manufactured 10 years ago. I would like to know, therefore, what the life expectancy is of refrigerators manufactured in 1927, 1930, 1935, and 1937.

"2. What is the nature of the replacement market? This involves such questions as how large is the replacement market at the present time; how old are the boxes being replaced; and why are people replacing them? Do people replace refrigerators because of external style changes, gadgets and internal convenience, or mechanical troubles?

"3. What kind of a secondhand market is being built up? This involves such questions as who is handling the reconditioning and reselling of used refrigerators; is the resale price high enough to finance the cost of reconditioning and reselling of used refrigerators; is the resale price high enough to finance the cost of reconditioning and reselling and leave anything in the way of trade-in value; how much is allowed for trade-ins; and how much are secondhand refrigerators selling for? How much of the trade-in allowance must be taken out of the dealer's margin?

"I would appreciate it very much if you would give me whatever answers you can to the foregoing questions, refer to any published materials which have factual evidence on these questions, or make available to me any information which you may have."

Answer: As you must realize, in order to obtain precise answers to the questions you put, it would be necessary to conduct surveys, the cost of which would be colossal.

We have, however, published some information which may be helpful to you. On page 8 of the Jan. 22, 1936, issue of REFRIGERATION NEWS under the heading "Refrigerator Retirements" there is a very interesting discussion of this subject, and one which also touches on the matter of the life of a refrigerator.

On the front pages of the Jan. 6, 1937, and the Jan. 5, 1938, issues of REFRIGERATION NEWS are tabulations showing estimates of refrigerator sales and retirements by years, based upon the best figures available. The news story accompanying the tabulation on page 1 of the 1938 issue explains how we arrived at some of these figures.

In the issues of the News from Jan. 12 through Feb. 23 of this year are surveys of refrigerator dealers in a number of major trading areas which offer figures showing how big a part of the dealer's business on refrigerators now involves trade-ins. There are also some articles in the issues of that period giving recommended values on trade-ins.

Seeks Brief on Meeting Of Food Distributors

No. 3284 (Manufacturer, Illinois)—"On July 27, 1938, page 8 of AIR CONDITIONING & REFRIGERATION NEWS gave a brief on the National Food Distributors Association convention to be held in Cleveland Aug. 17 to 20.

"Can you tell us where we can get a report of the proceedings of this convention?"

Answer: Stories about the Frozen Foods Conference held in conjunction with the National Food Distributors Association Convention appear in the Aug. 24, Aug. 31, and current issues of REFRIGERATION NEWS.

For a report on the complete proceedings of the Food Distributors convention, address Porter F. Leach, 5 Prospect Place, New York, N. Y.

Makers of Hand Cars For Refrigerators

No. 3285 (Manufacturer, Maryland)—"We are very interested in locating the manufacturer of a hand car, used to handle refrigerators. We want this for use in our warehouse, on the loading platform and in loading cars."

Answer: Address the following companies for information about a hand car used in handling electric refrigerators:

Lansing Co., Lansing, Mich.
International Engineering, Inc.
1145 Bollander Ave., Dayton, Ohio
Self Lifting Plano Truck Co.
Findlay, Ohio

Wants Data on Locker Construction

No. 3286 (Manufacturer, Pennsylvania)—"We have heard of the rapid strides made in the Frozen Food industry and the number of frozen food locker storage plants being erected. It is our desire to produce metal lockers for use in these installations. We do not have any information as to the type of locker required, regarding size, construction, etc., and we are wondering if you could be of assistance to us in furnishing us with information as to the general type of locker being used in the industry today.

"We are also wondering if it is possible to subscribe to a service which lists the various new installations under contemplation so that we may circularize the companies with a view to selling them lockers.

"You would also be of great help to us if you would give us some idea of the market value of the various lockers now being produced."

Answer: We have published a great deal of information about all phases of refrigerated locker storage plants including the size and construction of lockers which are used in such plants. We would recommend that you obtain copies of the June 8, June 29, and July 27 (1938) issues of the News, which are obtainable at a cost of 20 cents each.

We do not know of any service which lists the various new installations under contemplation. You might write to L. T. Potter, president, Iowa Locker Association, Waterloo, Iowa, who may be able to supply you with this information.

Market Index of Trade-in Prices

No. 3287 (Contractor, New Hampshire)—"Will you please write us giving details where we can obtain the book of trade-in prices as mentioned in one of your recent issues?"

Answer: Write to Herman Hantober, 96 Fifth Ave., New York, N. Y., for all information concerning the "National Market Index of Trade-in Values for Used Refrigerators."

Legislation Covering Wet Storage Coolers

No. 3288 (Manufacturer, Missouri)—"We understand that two or three states have passed definite legislation against the use of wet storage bottle beverage coolers. Please send us the names of these states."

Answer: As far as we can determine, the only states that have passed such legislation are New York and California. We understand, however, that some laws against the use of wet storage bottle beverage coolers are being enforced in Texas.

For further information about such laws, write directly to the Secretary of State of the various states, as they are usually willing to send copies of these laws to interested parties.

Manufacturer of 'Esco' Cooler

No. 3289 (Dealer, Michigan)—"Are you in a position to furnish us with the name and address of the manufacturer of 'Esco' sweet water bath coolers?"

Answer: We believe that the product to which you refer is manufactured by the Esco Cabinet Co., Esco Bldg., Westchester, Pa.

Story on Serviceman Who Used Trailer

No. 3290 (Manufacturer, New York)—"We are interested in the story of the refrigeration service man who has a trailer equipped for servicing refrigeration parts. Would you please tell us in what issue of AIR CONDITIONING & REFRIGERATION NEWS this story was published?"

Answer: This story was published on page 11 of the Oct. 13, 1937 issue of the News.

Portable Humidifier For Residences

No. 3291 (Dealer, Wisconsin)—"Kindly advise where I may secure a small portable humidifier for atomizing water in small residence where a full air-conditioning unit will not be used."

Answer: The following are manufacturers of small room-type humidifiers:

American Moistening Co.
260 W. Exchange St., Providence, R. I.
Betz Unit Air Cooler Co.
6 West Ninth St., Kansas City, Mo.
Corozona Air Conditioning Corp.
1422 Euclid Ave., Cleveland, Ohio

Hexcel Radiator Co.
Racine, Wis.
Mayflower-Lewis Corp.
E. Seventh St. at Duluth, St. Paul, Minn.
Parks-Cramer Co.
970 Main St., Fitchburg, Mass.
Standard Engineering Works
289 Roosevelt Ave., Pawtucket, R. I.
United American Bosch Corp.
3664 Main St., Springfield, Mass.
Vigor-Aire Corp.
127 S. Fifth St., Philadelphia, Pa.

Bureau Has Details On Fall Range Drive

No. 3292 (Utility Company, Quebec)—"We would appreciate it if you could obtain for us the details of the Modern Kitchen Bureau fall promotion program for electric ranges centering around October as 'Discovery Month.'"

Answer: Write to the Modern Kitchen Bureau, 420 Lexington Ave., New York, N. Y., for full particulars about their fall program.

Refrigerant Restrictions Hit Cooling in Japan

TOKYO, Japan—Owners of air-conditioned buildings in Japan are facing difficulties at present because of current restrictions over imports and sale of methyl chloride and ammonia, the two most widely used cooling agents in this country, the American commercial attaché's office reports.

Reporting on the plight of Tokyo cooling equipment users, the Japanese-language newspaper Miyako says:

"The coolness of Tokyo's air-conditioned office buildings and theaters this summer is threatened by a shortage of the best cooling agent, methyl chloride, and of the best substitute, ammonia.

"Japan is dependent on foreign countries for the first, and the control of foreign exchange has stopped importation of it. Ammonia is being absorbed for purposes which the authorities consider more vital than the cooling of buildings.

"To make matters worse, the owners of buildings who are having difficulty in air conditioning them are in trouble with the police. Health regulations require that window space be a twentieth of floor area, and that 35 cubic meters of air for each occupant of a room be circulated hourly.

"Only by using air-conditioning equipment can most of the city's large buildings meet these requirements, and now they are finding operation of the equipment hampered.

"Owners of nearly 1,000 large buildings and 400 theaters are said to be going to the Metropolitan Police Board almost daily to plead for relaxation of the building regulations or assistance in obtaining methyl chloride or ammonia."

Conditions existing in Tokyo are believed to be representative of those prevailing in all urban centers of this country, the U. S. commercial attaché's office says.

Questioned concerning the newspaper report, a representative of a prominent American import and export company in Tokyo, whose office building is completely air conditioned, said that applications for imports of methyl chloride and similar cooling agents are being turned down.

Number of buildings in Tokyo equipped with air-conditioning installations is not so great as indicated by the Miyako, however, he added.

Similar confirmation was received from the representative of an American import house, also located in Tokyo, who likewise opined that the number of buildings mentioned as air conditioned was on the high side.

This informant also stressed the possibility of restrictions over use of electricity for air-conditioning units. He said that in Kobe, for instance, municipal authorities are now considering severe restrictions for such use of electricity.

Present indications, according to the attaché's office, are that use of air-conditioning equipment will be greatly reduced, and possibly entirely banned, both because of the prohibition of imports on the necessary chemicals, and because it is claimed that use of the equipment is out of keeping with present conditions in Japan. The restriction also applies to the use of neon light signs.

World Household Sales In July Total 100,000; Down 50% From '37

NEW YORK CITY—World sales of household electric refrigerators by manufacturers to distributors and dealers totaled approximately 100,000 units during July of this year, according to estimates by AIR CONDITIONING & REFRIGERATION NEWS. This is a decrease of more than 50% from the estimated shipment of 206,500 units in the same month last year.

For the first seven months of this year, world shipments are estimated at 1,104,700 units, as compared with an estimated 2,035,600 units during the equivalent period of 1937.

Shipments by members of National Electrical Manufacturers Association (Nema) to distributors and dealers throughout the world totaled 95,154 units during July this year, compared with 192,052 units during the same month a year ago.

Refrigerators with lacquer-exterior finishes led porcelain-exterior models about 9-to-1 in shipments during the month, according to Nema figures. Models of between 4 and 7-cu. ft. capacity enjoyed the greatest popularity, with those in the 6-cu. ft. class in most demand by distributors and dealers.

World sales of commercial refrigeration and air-conditioning equipment by Nema member manufacturers during July totaled 15,643 units, a drop of more than 35% as compared with shipments of 25,008 units in July of last year.

Self-contained air conditioners were the only products to show a lead in sales during July over comparable 1937 figures, but bottled beverage coolers made a comparatively strong showing with shipments of 2,676 units during the month, as compared with 3,723 in July last year.

Shipments of commercial condensing units totaled 7,787 units during the month, as compared with 11,861 units last July.

In the Nema household refrigerator shipments by states, New York maintained a commanding lead during July with 12,106 units. California was next, with 6,912 units, Illinois third, with 6,543 units, and Pennsylvania fourth, with 5,880 units.

Littlefuse Announces New Electrical Test Device

CHICAGO — A new pocket-size tester for live or open circuits, blown fuses, defective condensers and resistors, a.c. and d.c. determination, approximate voltage, and grounded lines, suitable for use by refrigeration and radio service men as well as electricians, has been introduced by Littlefuse Laboratories, Inc.


Called the "Tattelite" and listed at \$1, the new tester has two prongs converging into an injection molded Tenite case with a limiting resistor in series.

A HEARTY WELCOME
Awaits You at
HOTEL BARLUM
810 OUTSIDE ROOMS
WITH COMBINATION
TUB AND SHOWER
From \$2.00



CADILLAC SQUARE AT BATES ST
DETROIT

THE BUYER'S GUIDE



TYLER
WELDED STEEL Refrigerators

● DEALERS who have the Tyler line are making surprising sales records. Tyler's welded steel construction and big values offer a tremendous advantage. Complete line. Unlimited prospects. Top Display... Double Duty... Delicatessen Cases... Reach-ins... Walk-ins. Wide range of sizes. Beautiful, modern, streamlined designs. Latest engineering improvements. Write now for dealer catalog.

TYLER FIXTURE CORPORATION., Dept. E, Niles, Mich.
New York Office: 601 W. 26th St. Chicago Office: 1663 W. Ogden Ave.

SIZES AND TYPES TO TAKE CARE OF EVERY PROSPECT

MILLS
COMPRESSORS
for Commercial Use

Mills Novelty Company • 4100 Fullerton Avenue • Chicago, Illinois



HENRY
WING CAP VALVE
DESIGNED ESPECIALLY FOR FREON
GLOBE VALVE WITH COMPANION FLANGES

Has patented, swivel, self-aligning stem-disc. Resilient packing. Cap be re-packed under pressure. Wing cap can be inverted and its socket used to operate valve. Cap sealing on bonnet provides additional protection against leaks. Unrestricted flow. Companion flanges simplify installation. WRITE FOR CATALOG

HENRY VALVE CO.
STOCKED BY LEADING JOBBERS

CLASSIFIED ADVERTISING

RATES: Fifty words or less in 6-point light-face type only, one insertion, \$2.00, additional words four cents each. Three consecutive insertions \$5.00, additional words ten cents each.

PAYMENT in advance is required for advertising in this column.

REPLIES to advertisements with Box No. should be addressed to Air Conditioning & Refrigeration News, 5229 Cass Ave., Detroit, Mich.

EQUIPMENT FOR SALE

FOR SALE—250 Universal twin cylinder compressors—sulphur or methyl (1936 models), removed from running installations. Need reconditioning. Priced for immediate sale—as is without flywheel—\$3.50. With flywheel—\$4.00. F. O. B. Springfield, Illinois. HUMMER MANUFACTURING COMPANY.

ROCK WOOL. Portable electric blower with 50 ft. of hose. Capacity 350 sq. ft. per hr. Two men handle and operate. Uses less than 1 kw. per hr. Plugs into house current. Price \$145.00 Fob Wabash, Ind. P. O. Box 304.

REPAIR SERVICE

CONTROL REPAIR service. Your controls repaired by expert mechanics, with special precision equipment. Supervised by graduate engineers. We stress perfection and dependability before price. One year guarantee on domestic controls. Any bellows operated device repaired. HALEY ELECTRIC LABORATORY, 1793 Lakeview Road, Cleveland, Ohio.

GRUNOW OFFICIAL Service Station established in New York for convenience of dealers throughout New England, New York state and east of Pittsburgh. All compressor exchanges guaranteed and work done under the supervision factory trained experts. Our prices are lowest in the industry. Also save on transportation. Write or wire for special bulletin. Twenty-four hour exchange service. Complete stock on hand. All official Grunow parts. GRUNOW REFRIGERATION SERVICE, INC., 610 West 37th Street, New York City.

DOMESTIC CONTROLS repaired: Ranco pencil \$1.75, Ranco box \$2.00, General Electric \$2.00, Tag \$2.00, Cutler-Hammer \$2.00, Penn \$2.00, Bishop Babcock \$2.50, Majestic \$2.50, Penn magnetic \$2.50, G. E. Frigidaire \$2.50. In business over 20 years. Our name is our guarantee. UNITED SPEEDOMETER REPAIR CO., INC., 436 West 57th Street, New York City.

GENERAL ELECTRIC and Westinghouse hermetic units rebuilt. Guaranteed unconditionally for one year and returned to you refinished like new. Units are entirely disassembled in our large modern shop, tested through every step of production during rebuilding with the most complete test equipment for accurate work, then subjected to exhaustive running tests under actual operating conditions. Each unit measures to exacting standards after rebuilding. Prices \$30.00 on General Electric DR-1, DR-2, and Westinghouse; \$35.00 on General Electric DR-3. Quotations furnished on other models. Quick service—guaranteed work. REFRIGERATION MAINTENANCE CORP., 365 East Illinois St., Chicago, Ill.

WORLD'S LARGEST Rebuilders of hermetic units. Specializing in Majestic, G. E., Westinghouse, Grunow, Frigidaire, Kelvinator, Gibson, Crosley, Norge, Sparator, Leonard, Goldspot, Stewart-Warner, etc. Dealers exchange price \$30.00 with 18 months' written guarantee. Parts for Grunows and Majestics, G & G GENUINE MAJESTIC REFRIGERATOR AND RADIO PARTS SERVICE, 5801 Dickens, Chicago.

BUSINESS OPPORTUNITIES

LIVE BUSINESS in nation's bright spot of over hundred thousand population. Business well established, location good, natural gas at reasonable rates. Selling with exclusive contracts, Servel Electrolux refrigerators, Tappan divided top gas ranges, Rudd water heaters, Bryant furnaces and Estate gas heatrolas. Health forces owner to sell. Box 1078, Air Conditioning & Refrigeration News.

PATENTS

HAVE YOUR patent work done by a specialist. I have had more than 25 years' experience in refrigeration engineering. Prompt searches and reports. Reasonable fees. H. R. VAN DEVENTER (ASRE), Patent Attorney, 342 Madison Avenue, New York City.

Anaconda Copper Refrigeration Tubes

Unusually soft!



THE AMERICAN BRASS CO.
FRENCH SMALL TUBE BRANCH
General Office, Waterbury, Conn.

More Sales Help For Jobbers



A Henry Valve Co. representative shows a jobber's salesman how to use the "open book" counter display which Henry has prepared to aid jobbers in selling its products.

'Graphic' Explanation Basis of New Display

CHICAGO — Henry Valve Co. makes an "open book" of the construction of its driers, strainers, valves, and fittings, in the newest counter display now being made available to jobbers throughout the country.

Representing a new application of an old merchandising principle, the display, developed by the Raymond C. Hudson advertising agency, is designed to enable jobber counter salesmen to quickly and graphically explain the construction and application of any item in the Henry line, at the point of purchase.

Ira Baker To Distribute G-E In 5 Ohio Counties

CLEVELAND—Ira E. Baker Co. has been appointed authorized distributor of General Electric automatic heating and air-conditioning equipment in Cuyahoga, Geauga, Lake, Lorain, and Ashtabula counties, Ohio.

Mr. Baker and associates will work with home builders, building contractors, architects, and heating and ventilating dealers and contractors in selling a complete line of G-E automatic gas and oil furnaces and boilers, air circulating and exhaust fans, and room-cooling units.

Floor Merchandiser Is Designed By Peerless

CHICAGO — The new Peerless model V thermal expansion valve now is the object of an extensive nationwide promotional campaign by all jobbers of Peerless products.

Promotional material furnished to these jobbers consists of three large 30 x 40-inch posters, a long banner sign, blotters and folders for counter and mail distribution, and a floor stand merchandiser. All but the floor display are furnished by the manufacturer without charge, and cost of this merchandising aid is split equally between manufacturer and jobber.

The floor merchandiser consists of an exact but greatly enlarged reproduction of the Peerless "Velvet Action" valve package, on top of which are arranged two tiers of the actual containers. Surmounting the entire display is a cross-section of the model V valve showing all details of construction. The display is 5 feet high overall.

One of the posters furnished pictures an enlarged cross-sectional view of the valve with interesting constructional features indicated and explained. The other two posters dramatize the appearance and construction of the model V valve.

The orange and black blotter is an exact reproduction of the valve container, both in shape and color.

Penthouse Houses Units For Louisville Hospital

LOUISVILLE, Ky.—Four individual Carrier air-conditioning units have been installed in the operating rooms on the top floor of the Kentucky Baptist hospital here.

Each of the four rooms was equipped with a separate unit to eliminate the possibility of germs being distributed from one room to another. The units themselves are housed in specially constructed penthouses on the roof directly above the respective operating rooms which they condition.

Ductwork is concealed, the only evidence of the air-distributing system being the ornamental grilles in the walls of the rooms.

All air is double filtered, being passed through two sets of filters before it is diffused into the rooms.

New York Leads States In July and 7-Mos. Household Sales

States and Territories	Quantity	
	Household Low Sides	July Cumulative
Alabama	615	9,021
Arizona	85	2,501
Arkansas	476	5,808
California	6,912	66,201
Colorado	731	7,444
Connecticut	1,118	13,072
Delaware	169	1,876
District of Columbia	1,092	11,083
Florida	874	9,561
Georgia	945	11,819
Idaho	402	3,797
Illinois	6,543	82,730
Indiana	2,061	23,734
Iowa	1,605	19,002
Kansas	770	11,678
Kentucky	776	11,988
Louisiana	1,192	12,954
Maine	590	4,616
Maryland	1,466	12,161
Massachusetts	3,294	35,293
Michigan	4,137	38,700
Minnesota	2,019	25,932
Mississippi	324	5,027
Missouri	2,695	28,901
Montana	272	2,862
Nebraska	933	7,953
Nevada	74	1,129
New Hampshire	266	2,650
New Jersey	3,597	35,759
New Mexico	107	1,918
New York	12,106	115,479
North Carolina	843	17,793
North Dakota	273	2,301
Ohio	4,811	50,553
Oklahoma	783	11,540
Oregon	877	8,281
Pennsylvania	5,880	83,532
Rhode Island	213	3,784
South Carolina	466	7,562
South Dakota	172	2,450
Tennessee	992	14,465
Texas	3,857	46,018
Utah	287	5,801
Vermont	269	2,543
Virginia	554	13,834
Washington	1,765	15,980
West Virginia	621	9,053
Wisconsin	1,814	21,059
Wyoming	102	1,309
Total United States	82,835	940,507
Canada	2,631	32,567
Other Foreign (Incl. U. S. Possessions)	9,698	76,603
Total For World	95,154	1,049,677

Nema Household Sales To Distributors In July Total 95,154 Units

The following 17 member companies of the Refrigeration Division of the National Electrical Manufacturers Association (Nema) reported household refrigerator sales for July, 1938: Apex Electrical Mfg. Co., Crosley Radio Corp., Edison General Electric Appliance Co., Inc., Fairbanks, Morse & Co., Frigidaire Corp., General Electric Co., Gibson Electric Refrigerator Co., Johnson Motors Co., Kelvinator Div. Nash-Kelvinator Corp., Leonard Div. Nash-Kelvinator Corp., Norge

Div. Borg-Warner Corp., Sparks-Withington Co., Stewart-Warner Corp., Sunbeam Electric Mfg. Co., Uniflow Mfg. Co., Universal Cooler Corp., and Westinghouse Electric & Mfg. Co. Merchant & Evans Co. did not report.

The sales of the reporting companies do, however, include units manufactured for the following concerns: Montgomery Ward & Co., Potter Refrigeration Corp., and Sears, Roebuck & Co.

SALES FOR JULY, 1938

	Domestic	Canadian	Other Foreign	Total World
Lacquer (Ext.) Cabinets Complete				
1. Chest	294	...	63	357
2. Less than 3 cu. ft.	...	172	94	266
3. 3 to 3.99 cu. ft.	2,740	26	1,807	4,573
4. 4 to 4.99 cu. ft.	14,307	1,170	3,449	18,926
5. 5 to 5.99 cu. ft.	17,169	630	2,160	19,959
6. 6 to 6.99 cu. ft.	29,648	320	860	30,828
7. 7 to 7.99 cu. ft.	7,235	60	266	7,561
8. 8 to 8.99 cu. ft.	2,465	27	86	2,578
9. 9 to 9.99 cu. ft.	23	...	...	23
10. 10 to 10.99 cu. ft.	3	...	...	3
11. Total Lacquer	73,884	2,405	8,785	85,074
Porcelain (Ext.) Cabinets Complete				
12. Up to 4.99 cu. ft.	62	1	29	92
13. 5 to 5.99 cu. ft.	1,281	27	165	1,473
14. 6 to 6.99 cu. ft.	3,837	2	105	3,944
15. 7 to 7.99 cu. ft.	1,335	8	70	1,413
16. 8 to 8.99 cu. ft.	1,421	2	68	1,491
17. 9 to 9.99 cu. ft.	162	2	12	176
18. 10 to 10.99 cu. ft.	338	7	22	367
19. Total Porcelain	8,436	49	471	8,956
20. Total—Lines 11 and 19	82,320	2,454	9,256	94,030
21. Separate Systems ¼ hp. or less	343	8	386	737
22. Separate Household Evaporators	162	169	56	387
23. Total—Lines 20, 21, and 22	82,825	2,631	9,698	95,154
24. Condensing Units ¼ hp. or less	395	178	237	810
25. Cabinets—No Systems	33	...	42	75
Index Value* of Total Dollar Sales	60.7	158	80.8	63.2

*Based on weighted sales for 1934, 1935, and 1936.

THE BUYER'S GUIDE



Chieftain
WE CAN SUPPLY YOU WITH—

Message
No. 6

1. 1/6, 1/5, 1/4, 1/3, 1/2 & 3/4 hp. units.
2. Single, twin, and four cylinder compressors at highest quality & economical cost.

TECUMSEH PRODUCTS CO., TECUMSEH, MICH.

Modern Refrigeration Shafts

For reliable, accurate, time-tested service, Shafts by "MODERN" are regarded as leaders in the refrigeration and air conditioning industry. Send us your blueprints and specifications for estimates on your Shaft requirements.

MODERN MACHINE WORKS, INC. 5353 S. Kirkwood Ave. Cudahy, Wisconsin

Copies of Air Conditioning & Refrigeration News Bound for Reference Use

Copies of Air Conditioning & Refrigeration News (formerly Electric Refrigeration News) for the past five years are available in bound books. These volumes, each covering a four-month period, are bound in a stiff paper board cover or in black imitation leather. Prices: \$3.00 each for paper binding or \$5.00 each for imitation leather, f.o.b. Detroit.

Vol. 8—Jan. 4 to April 26, 1933.	Vol. 16—Sept. 4 to Dec. 25, 1935.
Vol. 9—May 3 to Aug. 30, 1933.	Vol. 17—Jan. 1 to April 29, 1936.
Vol. 10—Sept. 6 to Dec. 27, 1933.	Vol. 18—May 6 to Aug. 26, 1936.
Vol. 11—Jan. 3 to April 25, 1934.	Vol. 19—Sept. 2 to Dec. 30, 1936.
Vol. 12—May 2 to Aug. 29, 1934.	Vol. 20—Jan. 6 to April 28, 1937.
Vol. 13—Sept. 5 to Dec. 26, 1934.	Vol. 21—May 5 to Aug. 25, 1937.
Vol. 14—Jan. 2 to April 24, 1935.	Vol. 22—Sept. 1 to Dec. 29, 1937.
Vol. 15—May 1 to Aug. 28, 1935.	Vol. 23—Jan. 5 to April 27, 1938.

Shipment will be made by express collect unless otherwise specified.

A Handy Binder for Current Issues of the News

We offer a binder designed and made especially for keeping your current file copies of Air Conditioning & Refrigeration News neat and always available for ready reference.

The price is \$3.75 shipped to you postpaid in the United States and Possessions and Pan-American Postal Union countries. For all other countries, postage based on a shipping weight of six pounds must be added to the price. Send your remittance with order.

Business News Publishing Co., 5229 Cass Ave., Detroit

Major Appliances

Wincharger Provides Rural Profit Item

PETOSKEY, Mich.—For centuries wind has been used by mankind as a source of power. With the spreading of electric power lines over the country the old-fashioned wind-mill began to disappear, but its modern counterpart has returned as a new profit item for the appliance dealer, says C. J. Nelson of the Petoskey Electric Co., local G-E dealer here.

Known as the "Wincharger," this device consists of an airplane-type propeller, mounted on a steel frame and connected to a small electric generator.

This generator supplies a given amount of power to storage batteries, which in turn are used for operating radios, lights, milking machines, washing machines, and other motors on the farm.

The equipment, built by the Wincharger Co., Sioux City, Iowa, is available in 6, 32, and 110-volt capacities. The 6-volt unit is used only to generate power for radios, the 32-volt unit produces 650 watts of current, and the 110-volt unit produces 1,000 watts under normal operation. All units are equipped with a special air-brake, to prevent over charging of batteries.

"In certain instances farmers in this territory have let the rural electrification projects go right by, preferring to generate their own power with the Wincharger," Mr. Nelson said.

"The investment for a 32-volt unit is about \$85 with an additional \$65 for batteries. This cost is often lower than the cost of wiring their house and buildings for 110-volt current, and after the Wincharger is installed, the cost of operation is almost negligible."

Mr. Nelson believes that the Wincharger is one of the best investments that a farmer can make. The unit is also installed in cottages, where the expense of running electric power lines may be greater than the cost of the Wincharger equipment.

While it has been found that the 32-volt equipment is the most popular in the present line, Mr. Nelson feels that in a few years there will be a brisk demand for 110-volt equipment, which requires a larger investment in machine and batteries.

'Show It In the Home' Plan Jumps Sales of Roasters 120%

POUGHKEEPSIE, N. Y.—Sales of 600 Westinghouse "Automeal" roasters, a 120% increase over the same period of last year, were chalked up in the first five months of 1938 in an extended campaign by Central Hudson Gas & Electric Corp. in cooperation with 150 nearby dealers.

Keynote of the successful drive is "Get out to their homes!" Each of the utility's 14 field representatives is required to make 100 cold canvass calls a month.

The utility is selling the roasters only through cooperating dealers, and the dealer or one of his salesmen accompanies the Central Hudson representative on his cold canvass calls in the dealer's particular territory.

Most of the sales are on credit terms, and the first payment of \$2.90 goes to the dealer. Subsequent payments of \$1.60 are collected by the utility, which deducts 3% for financing, and the remainder is then remitted to the dealer.

R. B. Denhardt, retail sales manager for the utility, said that Central Hudson and the dealers plan to continue the cooperative campaign indefinitely.

Some of the selling points emphasized in the campaign are as follows: "Take roaster into home, show it, get down payment, and leave it."

"Don't leave roaster on trial without getting down payment—to assure a little patience while housewife learns to use it."

"Sell roaster and roaster stand together. This makes the unit a 'major appliance,' keeps it in use, on view for owner's visitors."

"Follow up sale of roaster with home service calls at buyer's home—to assure user's thorough understanding of its uses."

"Sell roaster to major appliance buyers—suggest adding price to total payments at time credit is arranged."

"Everyone's a roaster prospect. Sell it with cold canvass profitably."

Queen Stove Works Has Space-Heater Line

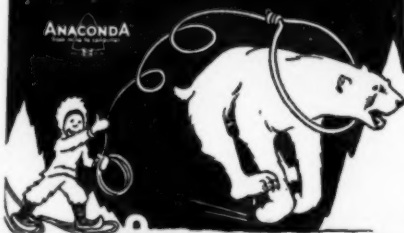
ALBERT LEA, Minn.—A new line of oil-burning space heaters, built in four models, has been announced by the Queen Stove Works, Inc. here. Known as the "Superflame" heaters, the units feature a burner which is said to operate at high efficiency with very little draft.

Secondary air is supplied to the burner above the throat, making it possible to reduce the draft, which is easier than increasing the draft by increasing the height of the chimney.

BUNDY TUBING

Copper-Brazed Steel. Copper Coated Inside and Out. Sizes: 1/8" to 3/4" O.D. BUNDY TUBING CO., DETROIT

Anaconda Copper Refrigeration Tubes for difficult jobs!



THE AMERICAN BRASS CO. FRENCH SMALL TUBE BRANCH General Offices: Waterbury, Conn.

Electric Range Well Up In 'C P' Test

(Concluded from Page 1, Column 3) the results averaged. The tabulated comparisons on the 21 "Certified Performance" points are shown in the accompanying table.

J. S. Bartlett, managing director of the Electric Institute of Washington, points out that the performance results were obtained, not from electric range manufacturers, but from actual Electric Institute tests.

"The gas range industry," says Mr. Bartlett, "will present its 'C. P.' range to the public as a revolutionary cooking device—something entirely new—a product superior to anything ever before known—(and, of course, the public will be led to believe that they include the electric range in their category of old-fashioned ranges)."

"But, no matter how 'revolutionary' the trimmings, gas ranges are still operated on the same basic principle of flame as the source of heat—the same principle used by the cave man in cooking his food. In our coming campaign, we are going to keep the cave man very much in the spotlight. And we now have the results of actual tests to prove the superiority of flameless cooking. 'Flameless cooking' is to be our campaign theme."

Teaser ads, putting the question "What is P. A." (public acceptance), have already appeared. The campaign will have its climax in October.

Crosley Enters Radio-Phonograph Market

CINCINNATI—With the introduction of two combination radio-phonograph models equipped with push-button tuning, and a new record player designed for use with radios already in service, Crosley Radio Corp. has entered the rapidly growing radio-phonograph market.

In announcing the new instruments, Powell Crosley III, vice president in charge of the radio division said that the Crosley company has been making radio-phonograph combinations for the export trade for several years, and has decided to concentrate more effort on the American market.

The two radio-phonograph combination models are a console type listed at \$49.95, and a portable unit priced at \$24.95. Both feature the Crosley push-button tuning.

Console unit, classed as model 438M, has a dark walnut cabinet with lift-up top lid concealing the radio controls and phonograph turntable. It is designed for operation on 60-cycle, 110-volt A.C., and has an electro-dynamic speaker. Cabinet is 33 inches high, 25 1/2 inches wide, and 15 inches deep.

Phonograph built into the console model has a newly developed self-starting motor and high-impedance pickup, the latter being automatically cut in by the switch which starts the motor.

Records up to 12 inches in diameter and 78 r.p.m. may be played on the phonograph, and a pocket for holding records is provided at the left of the turntable.

Portable table model 448A has the same radio-phonograph unit, and has a removable top section which covers the phonograph when not in use.

Cabinet has a stained walnut finish, and is 10 1/2 inches high, 10 1/2 inches wide, and 8 1/2 inches deep. Space is provided for carrying six 10-inch records.

The record player unit is the same as the one built into the radio-phonograph combinations, and is housed in a cabinet 10 1/2 inches long, 6 1/2 inches wide, and 2 1/2 inches deep. Its list price is \$9.99.

"Superior by name Superior in Quality"

SUPERIOR VALVE & FITTINGS CO.

500-37TH ST. PITTSBURGH, PENNA.

Manufacturing a complete line of DIAPHRAGM PACKLESS VALVES, MANIFOLDS, ACCESSORIES AND FITTINGS for the Refrigeration and Air Conditioning Industry.

How Electric & Gas Ranges Measure Up

CP Gas Range Requirement	Electric Range Performance
CP 1—Oven shall reach 500° F. from 70° F. room temperature in 11 min. (Rate 39.1° F. min.)	Average 10 min. 37 sec. Rate 40.6° F. per min. Fastest range reached 500° in 8 min. 55 sec.
CP 2—Ovens, empty, shall maintain a minimum temperature of 250° F.	No difficulty. Some maintained 150° F.
CP 3—Average surface temperature of oven exteriors shall be not over 75° F. above room temperature.	Electric ranges at 500° F. for an hour averaged 35° above room temperature.
CP 4—Automatic oven burner lighter with automatic device to prevent escape of unburned gas shall be provided for each oven.	When the switch snaps, the full heat is on.
CP 5—An oven thermostat shall be provided.	Even the cheapest electric ranges have employed thermostats for 10 years.
CP 6—Heating ovens from 70° room temperature to 500° shall require input of not more than 1,600 B.t.u. per cu. ft. of oven space.	Required only 828 B.t.u. per cu. ft. of oven space, or about one half of gas range input.
CP 7—Maintenance of oven temperature of 500° shall require not more than 3,800 B.t.u. per hour per cu. ft. of oven space.	829 B.t.u.
CP 8—Oven vents shall discharge flue gases away from rear wall.	No flue gases.
CP 9—Ball bearing rollers, or equivalent on all drawers.	Standard equipment for 10 years.
CP 10—Effective stops for all drawers and racks.	All six ranges had them.
CP 11—Broiler temperature on combination oven and broiler ranges shall reach 600° F. above room temperature within 15 minutes.	Such high temperatures not required for broiling. However, only 10 minutes 29 seconds required.
CP 12—Exposed broiler surfaces shall not exceed a maximum temperature of 150°.	Surface of range did not exceed 120° at oven temperature of 500° for an hour.
CP 13—An effective smokeless type of broiler pan shall be provided.	Developed first by electric range manufacturers and standard equipment for many years.
CP 14—Automatic broiler lighter with automatic device to prevent escape of unburned gas shall be provided.	Only required in "flame" type of cookery.
CP 15—Minimum effective broiling area shall be equal to 50% of horizontal cross-sectional area of broiling compartment.	Average of all ranges tested was more than 50%.
CP 16—Average broiler temperature shall reach 600° F. above room temperature within 15 minutes with a rated hourly input less than 22,000 B.t.u. per sq. ft. of broiling area. (50%)	10 minutes 29 seconds to reach 600° F. above room temperature. Average heat input was 34% of the gas requirement.
CP 17—Top burners shall be of dual purpose of simmering. "High-Low" type burner valves are acceptable.	More than offset by "High," "Medium," "Low" controls on electric ranges.
CP 18—One or more top burners shall have an input rating of 12,000 B.t.u. per hour and shall have an output capacity sufficient to raise 5 lbs. of water 140° F. in not more than 9 minutes.	Highest B.t.u. yielding electric surface unit yielded only 7,170 B.t.u. Required less than 9 minutes to raise 5 lbs. of water to 140°.
CP 19—Automatic top burner ignition shall be provided for all top burners.	Switches instead of matches, radiant glow instead of flame.
CP 20—Top burner heads shall be either constructed of rust-resisting metal or shall have an enamel finish.	Pertinent only to gas ranges.
CP 21—Thermal efficiency of standard gas range top burners shall be not less than 45%.	Tests proved electric oven to be four times as efficient as gas in utilization of B.t.u. 40% greater efficiency in favor of electric surface units evidenced even in water tests mentioned in "CP 18."

G-E Expands Merchandising of Electric Blankets; To Concentrate Drive on New 'Crib' Type

BRIDGEPORT, Conn. — Having sold 1,500 electric blankets under a limited distribution policy last year, General Electric Co. now is planning to make this item the object of a real selling program for 1939, with the new electric crib blanket as the spearhead of the drive and with the entire campaign built around the slogan—"successor to the blanket."

The new electric blanket, improved and redesigned after extensive field tests, now is made of a new waffle-weave material and is available in three colors. In addition to the crib blanket, which the company believes indicates its faith in the safety of the device, an extra large size may be had upon order.

A new liberal service policy has been put into effect, with G-E heating device service stations in Seattle, Ontario, Chicago, and Bridgeport equipped to handle this work.

Value of the electric blanket to utilities lies primarily in its potential load-building capacity and in the fact that it represents an inherently good use of off-peak power, points out Roy W. Johnson, manager of G-E's miscellaneous household appliance sales.

Disregarding institutional uses, the basic maximum potential market for the electric blanket consists of the nearly 22 million wired homes in the United States. One blanket in each of these homes, operated eight hours a night for six months a year at 5 cents per kwh. would mean an annual revenue of approximately 157 million dollars.

"If only a 50% saturation is assured," said Mr. Johnson, "and if the sick and the old people to whom the blanket should especially appeal are disregarded, the electric blanket should eventually mean an annual revenue to utilities of \$63,000,000."

"While the retail price of electric blankets is high in comparison with regular blankets, they can be sold, as we have proved. It is appropriate to recall that the original electric refrigerator sold for much more than the icebox it replaced."

"If a utility is able to add to its lines during the year just 200 electric blankets, the extra off-peak current used will return \$1,440 in added revenue, assuming use of the blanket eight hours a night during half the year at an average rate of 5 cents per kwh. A thousand blankets will add \$7,200."

New G-E Dealership Opened In Alabama

ANNISTON, Ala.—Triple Thrift Appliance Co., owned by Fred C. Brigham, has opened as a General Electric dealership here.

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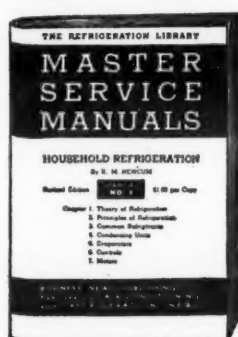
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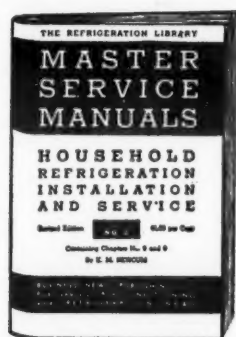
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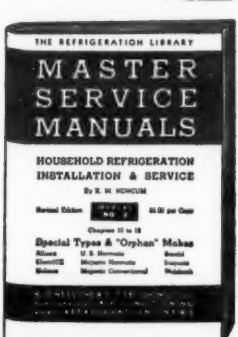
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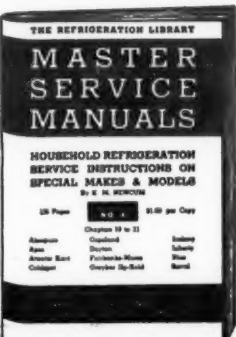
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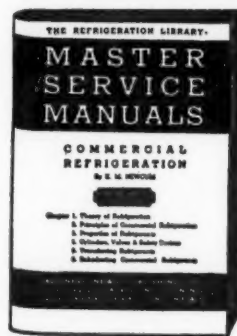


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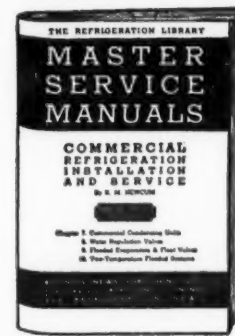


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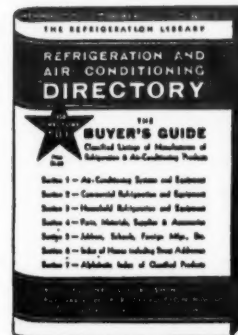


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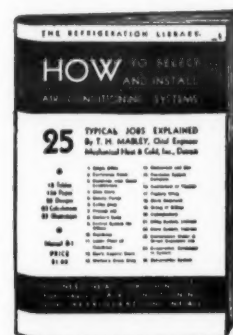
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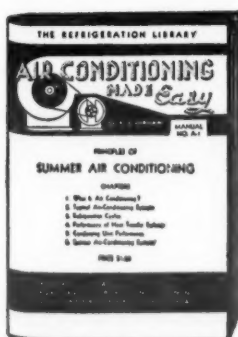
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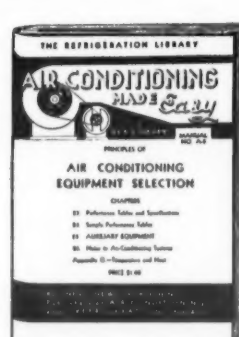
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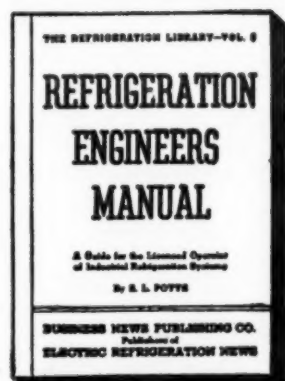
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